

Palmtop

The journal for today's Psion user

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Submissions

Any contributions of material published within the pages of *PALMTOP* (excluding 'On The Net') will earn the author a minimum of one free issue added to their subscription. If you wish to write feature articles for the magazine then please contact the editor to discuss your ideas.

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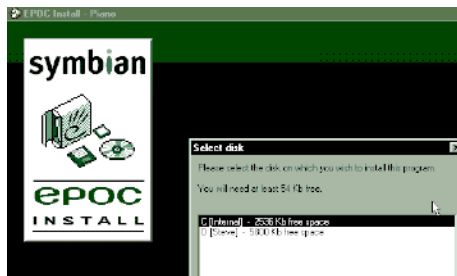
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General

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**Make the connection
with a GSM phone**

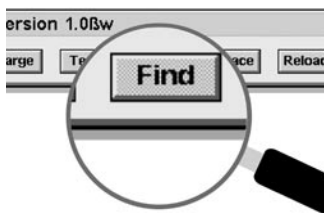


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Editorial

You could be forgiven for *not* having noticed the demise of Geofox Ltd on 3rd November. Their anonymity was probably their biggest enemy before their eventual disappearance into receivership. The Geofox One was released as the first Psion 'clone' late last year, without any major fanfare (other than within the pages of Palmtop. Geofox initially planned to sell the 'Fox primarily via their Internet web site, but always direct, as opposed to using the usual retail channels. Without the normal High Street presence this meant relying on potential purchasers reading about the machine in the computer press, or gleaning enough enthusiasm from their web site to reach for their wallets.

It would be grossly unfair to call it a recipe for failure—after all, Dell Computers and other mail-order giants thrive on a similar regimen. Perhaps the problem is that PCs are so much more of a known quantity. Everyone knows what a PC, keyboard and 14 inch monitor look like, have some idea of how fast a given model will perform, and know that the vast majority of hardware falls within certain quality boundaries.

Palmtop computers are another matter altogether, particularly as the Geofox One was a 'first of breed' model: the first to use that oversized-palmtop/'sub'-sub-notebook form factor, such a tiny Glidepoint pointing device, and an elastomeric keyboard with a non-standard key layout. In use, I personally liked the Geofox One a lot, and said so when reviewing the machine back in issue 15. But I also dropped in the caveat that potential purchasers really ought to try one out for themselves before making a purchase. All those non-standard features made the machine too idiosyncratic to

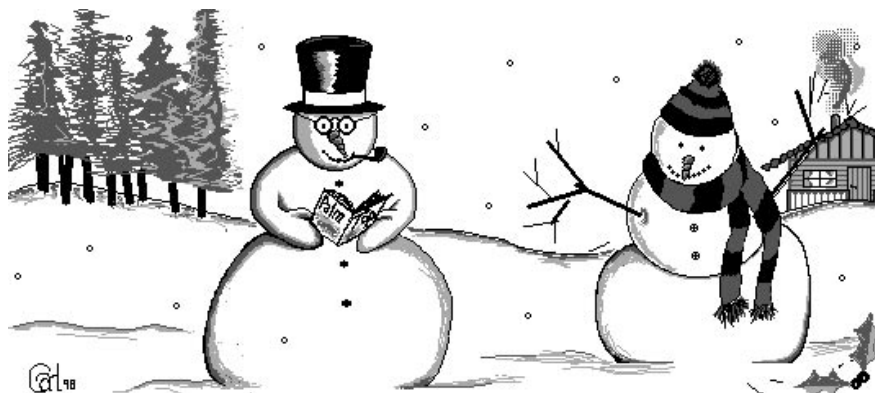
shell out £500 or so on specification alone, and many prospective Geofox customers would have dropped any consideration of the machine at that very juncture.

Geofox Ltd sensibly offered a 14 day trial on all mail order purchases, but the prospect of having to re-box an unwanted machine and go through the inconvenience of arranging collection and wait for the money to be refunded was understandably off-putting for many. The fact that Geofox Ltd were a new company would also have put off the more cautious mail order purchaser, who perhaps wondered if they would ever see any goods in return for their money.

Ten minutes of poking around with a Geofox One at the local electronics superstore would have answered all the outstanding questions and won a lot of friends. The computer press were generally quite positive about the machine, making it doubly sad that after reading good things about it a quick face-to-face look at the Geofox One was all it would have taken to persuade many people into a purchase.

The astonishing truth of the Geofox story is that in just over a year of trading, only one thousand machines were sold. This fell woefully short of the modest 10,000 target for the same period, and translates to a Series 5 vs. Geofox One sales ratio of around 200 to 1.

Balanced against the demise of Geofox Ltd, the next 12 months promise to be an exciting period for the EPOC platform. With Symbian now running at full tilt with Psion, Ericsson, Nokia and Motorola, we can expect to see new machines from all four players well before the turn of the millennium. The exact recipe for the non-Psion variants remains to be seen, and we're all guessing as to whether they'll



be primarily mobile telephones with some computing capacity (like the earlier Nokia 9000 Communicator), or fully rounded computers like the Series 5, with all the benefits of integrated Internet, phone and fax. The problem with the Nokia 9000 was that it was overly expensive and didn't fully satisfy either requirement. You can bet that the telecommunications giants won't make the same mistake again, and we can virtually take it for granted that the next generation will be an altogether more exciting proposition.

There's no doubt that the distinction between palmtop computers and mobile 'communicators' will fade into non-existence over the next few years, and that this will present us all with a more flexible way of working. Quite where Psion Computers (as opposed to Symbian) will position themselves at that time remains to be seen, and they may eventually become a less significant player in the larger EPOC arena.

One thing's for sure—over the next few years palmtop computer users will have the benefit of better choice, better connectivity and, by virtue of all this competition, better prices to boot. The next millennium will see handheld computers developing beyond our wildest imagination.

Steve Clack - December 1998

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The opinions of contributors do not necessarily coincide with those of Palmtop magazine.

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Newsreel

What's new in the Psion world...

Geofox cease trading

On 3rd November 1998 Geofox Ltd, makers of the first non-Psion computer running the EPOC operating system, announced that they would be going into voluntary liquidation. A meeting of creditors on 27th November revealed debts of almost £2 million, with only £16,000 in assets. The report also showed shockingly poor sales of only 1,000 units (against a target figure of 10,000) since the release of the Geofox One.

The Directors of Geofox Ltd attributed the demise of the company to failure of their direct sales strategy, lack of funding for expansion and the inability to attract further investment.

See page 87 for more news relevant to existing Geofox One owners.



Motorola joins Symbian

Psion PLC have announced that Motorola has signed an agreement to join Psion, Ericsson and Nokia as the fourth shareholder in the Symbian joint venture. Motorola will invest £28.75 million for new shares in Symbian.

The formation of the Symbian joint venture by Psion, Ericsson and Nokia was announced on 24th June 1998. On the same day, Motorola signed a Memorandum of Understanding to join the Symbian venture on similar terms to Ericsson and Nokia.

On completion of this latest transaction, Psion's shareholding in Symbian will be reduced from 40% to 30.7%. Ericsson, Nokia and Motorola will each own a 23.1% holding in Symbian. The transaction is conditional upon the approval of the European Commission and certain filings being made and clearances and consents being obtained. Completion is expected by the end of December.

"All the partners in Symbian are pleased at the realisation of this important step for the company", said David Potter, Chairman of Psion. "Motorola will contribute substantially to the long-term success of Symbian and provides core support to the venture."

The Board of Psion PLC has also announced that Mr Nicholas 'Colly' Myers is resigning as a director of the Company in order to focus his full endeavours on his rôle as Chief Executive Officer of Symbian Limited.

David Potter appoints new CEO for Psion

David Potter, founder of Psion and currently the chairman and CEO of the company, has announced that David Levin will take over as CEO on 22nd February 1999.

Levin, currently COO at Euromoney Publications, will handle day to day management of Psion, leaving Potter free to focus on strategic development of the company.



Dr David Potter appoints new CEO

Series 3mx price drop

Only two months after its initial release, on 1st November Psion dropped the price of the Series 3mx by £40 to £229.95 (including VAT). The price of the accompanying PsiWin 2.2 remains unchanged at £49.95.

Psion Sales: 0990 143050



No PsiWin Service Pack

The PsiWin 2.1 Service Pack, announced for imminent release as a free download from Psion's web site, has not yet been made available. The update is designed to add most of

PsiWin 2.2's functionality for Series 5 users. Check Psion's web site for announcements.

www.psim.com

Series 5 'Better by Design'

The Psion Series 5 has been announced as a double winner at the Design Business Association (DBA) Awards in London. The Series 5 collected the prize for best 'Consumer Product Design' and also one for the best overall entry, the 'Grand Prix' prize.

The DBA Marketing Week, Design Effectiveness Awards are a celebration of design and its importance in business. The nine categories attracted entrants from many different areas of design, including corporate identity, packaging, interiors, exhibitions, literature and new media.

"To walk away with a prestigious DBA award is the equivalent of winning an Oscar in the design world", said Paul Lubbock, Marketing Communications Director at Psion Computers PLC. "For the DBA to award us with the 'Grand Prix' is the icing on the cake."

Palmtop BV overlay contest

Palmtop BV have just announced a competition whereby each month they will make a draw from the best overlay files submitted for either their *Route Planner* or *Street Planner* software. The winner can choose a free Palmtop BV product of their choice.

The winner will be decided by a panel of judges at Palmtop BV.

Some ideas that might get you started:

- ▶ Public parking
- ▶ Fast-food restaurants
- ▶ Hotels
- ▶ Tourist attractions
- ▶ Hospitals
- ▶ 24 hour service stations

If you think you have created an overlay file that could be useful for other Street Planner and Route Planner users, please send it to overlays@palmtopsoftware.com



Palmtop BV open UK office

Palmtop Software Ltd, a subsidiary of the Dutch software company Palmtop BV, has now relocated to new offices in London.

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Marketing and PR : 0171 794 9615
Technical Support : 0171 794 9886

CompuServe drop Psion access

CompuServe, so beloved by many Series 3 users in the past, have announced that their Psion forum no longer supports ASCII (plain text) access. This unfortunately renders ReadCIS, one of the most registered shareware programs ever, much less potent. Access to this useful forum is now only possible via a desktop computer.

PowerBase released, Pro on the way...

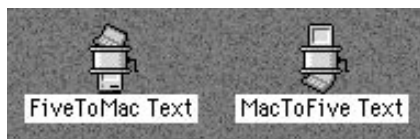
Purple Software's PowerBase relational database software has now been released (see page 26 for a full review). Purple have also announced that the first quarter of 1999 will see the introduction of PowerBase Pro, an enhanced version "...to address the needs of the corporate handheld user in the areas of client/server database management and enhanced inter-operation with desktop database applications".

Purple Software: 0171 3877777
www.purplesoft.com

Atelier offer free MacConnect enhancements

Atelier, authors of Psion's *MacConnect* product for the Series 5, are offering free add-ons to help convert plain text files between the Series 5 and Macintosh. *MacFive Text Extras* can be downloaded from the address given below, but are provided as-is, and are totally unsupported. Please do not contact Atelier for technical support on this freeware.

www.atelier-fr.com/mac5.html



New plain text converters for MacConnect



64MB CompactFlash available now

Widget Software are now offering Widget-badged 64MB CompactFlash cards for the Series 5. The cards cost £199.99 including VAT and come with a 5 year warranty.

Widget Software: 01438 815444

120MB CFs on the way...

Though official information is not available at present, at least one CompactFlash manufacturer is planning to release 120MB cards early in 1999. We will provide full details as soon as possible.

G-Tec offer relief for scratchy Series 5 screens

The Series 5 stylus tends to make disconcerting scratching sounds when used on an untreated screen. G-Tek's *Superscreen Screen Polish* attempts to reduce friction between stylus and screen surface, thus decreasing the risk of scratching and generally improving the feel of the stylus on the screen.



We've tried this polish and found that a few drops applied to a cloth then rubbed onto the screen and stylus tip reduce the 'scratchy' feel quite noticeably. The polish is supplied in 30ml canisters at £8.99 including VAT, and a single canister should last for many months. The polish is available to *Palmtop* readers at a reduced price of £6.99 per canister until the end of January 1999. See page 125 for further details.

New Series 5 in-car kit

Following the release of their *Series 3 Power Cord* and *In-Car Holder Kit*, Allcoms Ltd (previously Allgon Lovelock) have now released a Series 5 version comprising a mounting tray, bracket and adaptor plate. This allows the assembly to be lifted off when not in use and replaced in seconds. Allcoms also supply vehicle-specific *SafetyClip* in-car mounts which

New Palm-Tec hard case

Palm-Tec Ltd have announced their new series of 'MBC' hard cases, suitable for Psion Series 3 and Series 5 models. Priced at £24.95 for matt black and £27.95 for a heat-sealed glossy version, these new cases will be available in a choice of colours. Prices include postage/packing and VAT in the UK. Palm-Tec include a full 'never-argue' money back guarantee on all their cases.

We've had a good look at the MBC case and found it a *huge* improvement on the original design reviewed in issue 15. The ABS plastic case is virtually indestructible and now has moulding cutouts in the right places to allow Series 5 owners to both plug in power and extract the stylus with the palmtop *in situ*. A new, lower front lip means that the 5's sliding keyboard is no longer obstructed and the design lives up to its 'Mini Brief Case' (MBC) name.

Most importantly of all, the original case's awkward and unreliable catches have been replaced by sturdy ribbed catches which slide together to lock it closed.



The case now also incorporates two recesses in the padding to store additional CompactFlash cards.

The Palm-Tec MBC measures 180 by 104 by 35mm and weighs 150g. A heavyweight case that's suitable for the Psion with a truly rough lifestyle.

Palm-Tec Ltd: 01926 470615
www.palmttec.com

clip over the air vents and attach to the *In-Car Holder Kit* in seconds, without the need to drill holes or use any tools for mounting. Contact Allcoms directly for further details.

Allcoms Ltd: 01235 811119

will feature in-depth coverage of the finished product in issue 22.

Pelican Software: +1 281 242 8928
www.pelicansoft.com

Notepad release delayed

The Series 5 version of Pelican Software's *Notepad* project manager is still under development, and a full version was not available for review at the time of going to press. We

Dacom makes a million!

Psion Dacom, now a leader in mobile networking and the manufacturer of global PC Cards, announced in early December that it was about to manufacture its 1,000,000th Gold Card.



Psion Dacom has seen steady growth in the manufacture and sales of its lineup of Gold Card PC Card modems since it first began producing them in 1993. The company recently announced a 79% increase in sales for the first half of 1998. Sales increased to \$40.5m (1997-\$22.6m), reflecting rapid growth in all the company's major markets around the world.

Psion Dacom 01908 261686

NWT offer electronic delivery

New World Technologies Inc., North America's best known distributor and one-stop shop for Psion computing products, have announced a new Electronic Software Distribution (ESD) system on their web site. ESD will allow customers to purchase and download most commercial software without delay, a significant development—especially for those who are content to work with an electronic (rather than paper) manual.

Most products from Purple Software, Pelican Software, Atelier and Palmtop BV are already set up on the new system, with Jonathan Glaser, head of NWT, commenting "Our customers are the chief beneficiaries of ESD in the form of lower prices and immediate gratification without the hassles of shipping and boxes."

Email: brave@nwt.com

Special offers

Free penknife with Series 5

Clove Technology are offering *Palmtop* readers a free compact penknife with all new Series 5 sales. The knife, which will attach to a key ring, includes a knife, file, scissors, tweezers, toothpick and small screwdriver. Offers only available while stocks last.

Clove Technology: 01202 302796

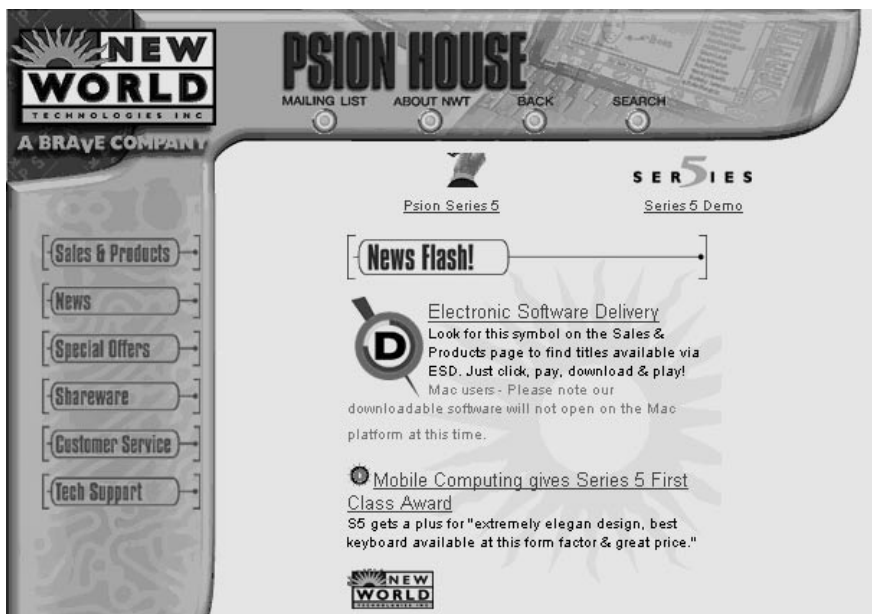


Exportech offers...

Exportech are offering the following specials until 15th January 1999, or while stocks last:

- Buy a GPSII+ or GPSIII and get a free GPS case worth £11.75
- Buy Route Planner or Street Planner and get £5 (inc. VAT) off any CF disk over 12MB
- Get £5 off any Covertex belt case or £8 off any Deluxe case with every purchase of a Series 3mx or Series 5

Exportech: 01202 422 570



www.nwt.com (see page 118)

PsionWorld in trouble

The PsionWorld Internet access service, commissioned originally by Psion from Sprynet, has again run into difficulties. Sprynet were taken over by Mindspring, who were then bought out by AOL, who have apparently decided to terminate non-US Mindspring accounts. These of course include the inherited Sprynet accounts for European Psion-World subscribers.

With the threat of closure, and following numerous recent hiccups in service, we strongly recommend that any remaining Psion-world users should make alternative arrangements for Internet connections.

Latest on Newsreader and IRC

It was announced in November that Palm-scape will no longer be dealing with the Newsreader and IRC internet applications for the Series 5. At the present time, the future of these two long-awaited products seems to be undecided. The author, Russ Spooner, has announced that development has stopped for the moment, and that support for the products is not available. The original 30 day trial versions of the packages can still be downloaded from www.labrat.demon.co.uk/nidl.html

INDUSTRY NEWS

In this new regular feature we devote a single page to what's happening in the non-Psion sector of the mobile computer world...

Following the recent introduction of the Phenom Ultra, LG Electronics have released the Phenom Express. The new notebook/handheld hybrid supports Windows CE 2.1 and includes Microsoft's new Handheld PC Pro applications. Notable features include a 12 hour battery life, touch-typeable keyboard, 256 colour screen, 32MB RAM and a built-in 56Kbps modem. However, these specifications do not come without a high price and the Phenom Express retails in the region of \$900.

Another addition to the handheld PC market has been unveiled by Sharp as an update to the Mobilon HC-4500. The HC-4600 comes with a full colour display, a built-in modem, 16MB RAM and more additional software than its predecessor. Again, high specifications mean a retail price in the proximity of \$900.

This year has seen the continuing development of the Palm Computing (Pilot) platform. Latest figures suggest that there are more than two million users worldwide. In contrast, Microsoft's Palm-sized version of Windows CE has made little impact upon the mobile computing market, which may account for Microsoft's alleged attempt to purchase the Palm Computing platform from 3Com earlier this year.

In spite of the fact that their machines are supported by Windows CE, Everex continue to remain at the forefront of the industry and have just launched the first 16MB Palm-size computer. The Manager and Executive

models of the Freestyle range of Palm-size PCs are now available with 16MB of RAM. Everex have also announced lower retail prices for all 4MB and 8MB models of the Freestyle.

There is still no sign of Palm Computing's much-anticipated device, codenamed 'Razor'. It has been suggested that the recent departure of several of Palm Computing's influential executives may be a significant factor in the delay of the release of a natural successor to the Palm III.

However, Palm Computing have released details of one new device. The forthcoming Palm VII is expected to become available early next year and will be priced at under \$800. The device's new features are based solely on how it connects to the Internet—there is a notable absence of hardware upgrades. A primary feature of the Palm VII is that it will allow users to get information from the web via a wireless connection, though currently only in the USA. Existing PalmPilot owners should be aware that it is not possible to upgrade existing devices to incorporate the new technology.

Finally, Palmtop BV have announced the addition of Windows CE programs to their portfolio. Route Planner has been ported to run on Windows CE powered HPCs. The software manufacturer is also offering Palmsweeper (a freeware version of Minesweeper) to users of Windows CE who visit the Palmtop BV web site.

Andy Nott

Shareware Shorts

Steve Litchfield takes a look at the latest additions to the world of Psion shareware...



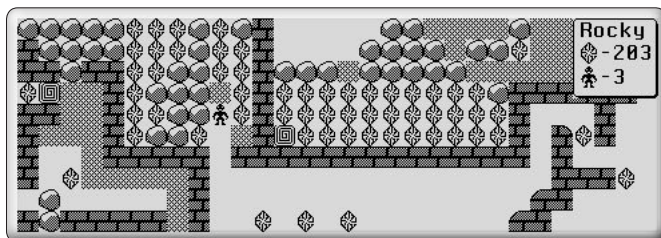
Despite the launch of the 3mx and my best intentions to track down new 16-bit (Series 3 and Siena) shareware, it has proven to be distinctly thin on the ground at the moment. The inexorable move to EPOC and the Series 5 in the programming fraternity has continued with a vengeance, with 95% of the new releases and upgrades in the last six months being for the newer platform.

Even in the world of EPOC, I've noticed a distinct slowdown in the last few months. This is partly because the Series 5 scene is now fairly mature and there are very few essential programs that are yet to be implemented. Add the existing 400 third party applications to Psion's own in the ROM and there aren't many niches left. Other reasons for a slowdown might be a lack of confidence in the Series 5 after its recent bad publicity over quality and a deliberate restraint to see whether there's a new machine round the

corner (possibly offering new challenges—a larger screen perhaps?)

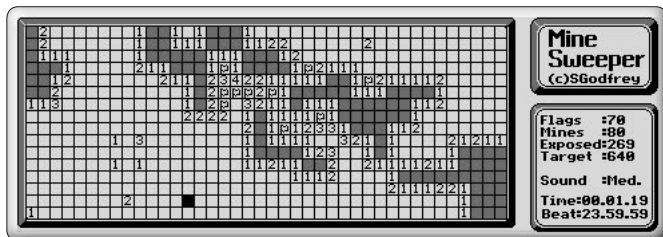
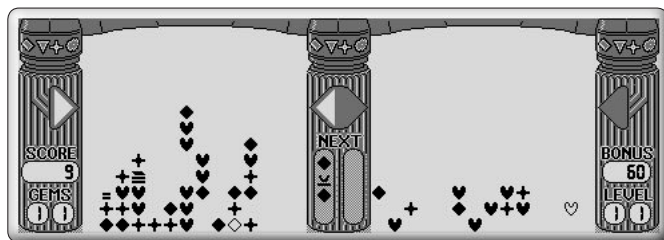
Games for Christmas

Steve Godfrey's recent activity on the Series 5 (see the *PhoneMan* review on page 30) has led him to give Series 3 users an early Christmas present by re-releasing all his 16-bit games as freeware. *Rocky* is based on 'RockFall', available for many computers, in which you have to collect diamonds while avoiding rocks and bombs. Bombs may be used to blow up walls and rocks (and yourself, if you're not careful). You can push a rock to the left or right if there is nothing on the far side of it and they'll fall if you remove anything below them. *Mine Sweeper* is of course a version of the Windows classic and a direct ancestor of the built-in game in the Series 5. *Columns* is based on the Sega Gamegear game of the same name, and bears certain resemblances to Tetris. Falling patterns



Don't get crushed—Rocky on the Series 3

Columns—two
games for the
price of one



Deducing mine
positions in
Mine Sweeper
for the Series 3

of shapes have to be manipulated using the cursor keys. Shapes are removed when four or more of the same type are touching in any direction except diagonally. Sprinkled in amongst the shapes are special gems which have to be collected as you go.

Gary Ewer's shareware *Worms* involves guiding your worm around the screen safely without crashing into others, another time-honoured arcade game. Impressively, you can have up to three human players and three computer players all at once.

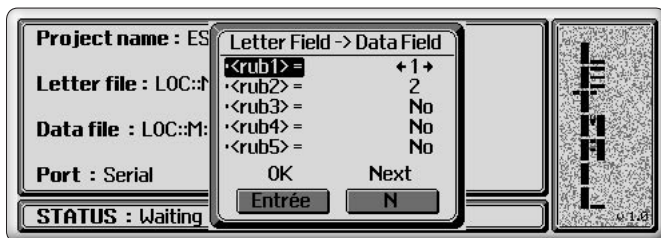
Papillons is a word game from **David Aldous**, devised specifically for the Psion. It comprises a string of words, each of which has to be found before you can move on to the next. Adjoining words are always related in some way: they may be anagrams of each other, two words may sound like one another (homophones), the two together (in either order) may make a common phrase, the name of a famous person or famous place, the two may be synonyms of each other—or there may be a bad pun. Crossword-like cryptic clues

are available to help you flit from word to word.

SpaceVenture is a new space trading game in which you take on the rôle of a lone space pilot whose aim is to travel the length and breadth of the 10 galaxies in the game, soak up the atmosphere and trade in the right goods to make a decent profit. With that profit, you can afford better craft, which can hold more cargo and travel further in one go. Each planet you trade with has markets dealing in a wide variety of goods, ranging from computers to military weapons. Planets also vary in their social, political and economic makeup, and so different products are in demand on different worlds. The author is **Kirk Bowe** and the game is shareware.

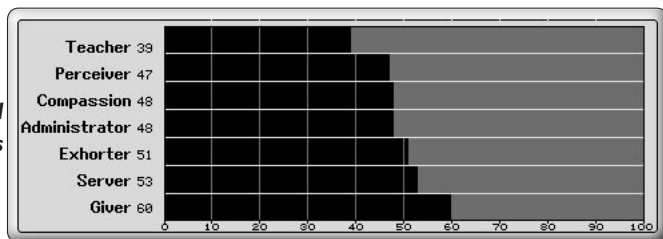
More seriously

LetMail is a novel idea from **Jean-Philippe Pasquier**. It's a mail merging program for the Series 3 whose purpose is to automatically print personalised letters, combining a standard text file with addresses from a DATA



An ambitious attempt to make your Series 3 more productive—LetMail

PsiGift can reveal your hidden gifts

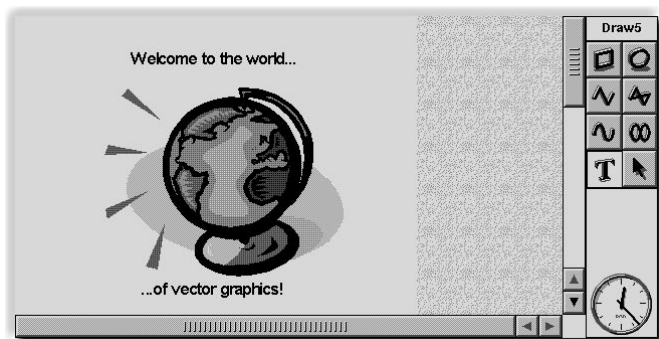


file. It wouldn't work for me, but it's a brave attempt and may just help you to get your Christmas letters out on time!

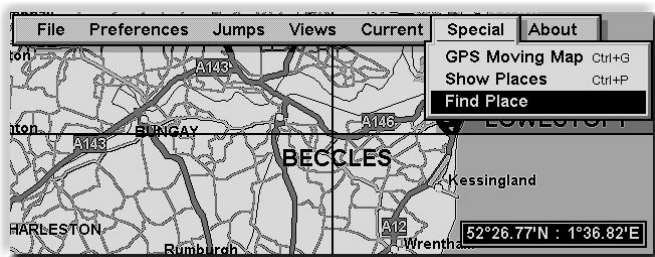
Charles Reed has put together *PsiGift*, a test you can take to find out how you are motivated and the real factors behind your actions and decisions. With over a hundred questions and a detailed results section, *PsiGift* is shareware and specifically aimed at Christians (though others may find it helpful).

Drawing on the Series 5

Moving onto EPOC and the Series 5, *Draw5* is a new shareware graphics application from **Interconnex**. You can use it to draw and edit pictures and diagrams made up from various vector-based objects. Vector graphics differ from bitmaps (such as those produced by *SKETCH*) in that they are a series of mathematical instructions rather than a matrix of pixels. This means that they can be scaled and rotated without loss of detail and that they're likely to need less disk space per



Interconnex's Draw5 vector graphics application, shown here running on the now discontinued Geofox One



**Scan your
own—real maps
in RealMaps!**

image. Another advantage of vector images is in printing, where the image will always be printed at the resolution of the printer—if you have a 600dpi printer then the image will also be rendered at 600dpi. Draw5 looks very promising and we'll be reviewing it in detail in a graphics software roundup in the next issue.

Kevin Millican has put a new spin on Psion mapping with his shareware *RealMaps*. As the name suggests, the idea is that you scan a real (paper) map and then convert the image into an EPOC picture (MBM) file. By telling the program the latitude and longitude of the image corners and plugging in a GPS handset you can convert your Series 5 to a high definition moving-map unit.

Quicker trivia

My own freeware *Trivia* mini-encyclopedia has been updated to version 2.4 and has been optimised to search three times faster than

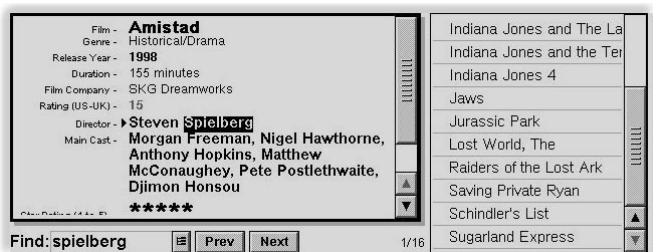
previously. Trivia includes 200K of useless and not-so-useless facts, figures and symbols.

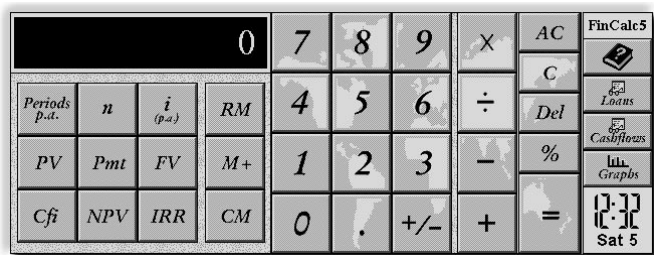
Staying with reference software, *Movies* is a first cut at a freeware movies database to rival the commercial Halliwell's product. Compiled by **Ben Vaisvil** and **Eric Keef**, it currently contains about 300K of movie information, concentrating mainly on hard facts rather than reviews or critical comments. Obviously far less complete than Palmtop BV's program, *Movies* does score by virtue of being far more up to date, even including facts on films not yet released across the world.

Financial protection!

Richard Smedley's *CodeCheck* is new 'must-have' for doing business in the modern world. Have you ever received an invoice from your electrician, only to find that he has charged you a hefty 17.5% VAT? Or are you worried that a plumber's bill scrawled on the back

**1200 films
catalogued in
the freeware
Movies**





**FinCalc5—Turn
your Series 5
into the
ultimate
financial
calculator**

of a cigarette packet might not be genuine? If so, then the shareware CodeCheck could help, by testing these 9-digit VAT codes to see whether or not they are valid. It also works with credit cards—when somebody gives you their card number, enter it into CodeCheck to instantly find out whether or not that number is valid. This could be very useful for protecting yourself against fraud.

FinCalc5 is a shareware financial calculator. It incorporates complex discounted cashflow analysis into a user-friendly graphical interface. Designed by **Greg Love** principally for the professional, it also incorporates interactive graphical modules which allow for the easy entry and manipulation of financial information for those less financially inclined. *FinCalc5* can be used for most calculations, ranging from complex discounted cashflow analysis to calculate a project's NPV to determining how much you can afford for a personal loan.

Entering the already hugely-crowded banking software market is **Simon Berridge's 5Account**. It features the usual accounts, categories and standing orders, plus extras such as Quicken import/export and client invoicing. *5Account* is also a banking system which allows for many currencies, enabling you to add a transaction in a foreign currency and have the result automatically converted to your home currency. *5Account* also lets you update the conversion rates at any time without affecting the existing written transactions, thereby allowing for daily fluctuations in the rates. Like *ABP* before it, *5Account* is a proper double-entry bookkeeping system.

Anyone for Golf?

Mian Gardner's GolfCaddy5 is an electronic caddy for you to carry on the golf course, automatically taking away the pain of totalling your score during and at the end of play. You can also record extra detail about your round which will allow you to completely analyse

**New program
but age-old
concepts—5Account**

Accounts View		Accounts	Categories	Standing Orders			
Type	Account Name	Liability		Asset	Balance		
Bank	Bank1			850.00		850.00	
Bank	Bank2			1,100.00		1,100.00	
Bank	Bank3			750.00		750.00	
Bank	Bank4			900.00		900.00	
Bank	Bank5	1,100.00				1,100.00	
Credit Card	CC1		850.00			850.00	
Credit Card	CC2	1,100.00				1,100.00	
Credit Card	CC3			900.00		900.00	
Credit Card	CC4			900.00		900.00	
Credit Card	CC5			900.00		900.00	
Opening			Reconciled		Current	850.00	

No cheating
please! *Golf*
Assistant

A: Keith										C: Rob										12 Medal																			
B:										0 D:										0 A+B: 0										C+D: 0									
Hole	1	2	3	4	5	6	7	8	9	Out	10	11	12	13	14	15	16	17	18	In	Out	Tot	Net																
Par	5	4	3	5	4	3	4	3	4	35	4	4	4	4	5	3	4	4	4	36	35	71	CAL																
Strk	11	5	13	15	7	9	11	7	3		2	14	8	10	18	12	4	16	6																				
PlyA	5	5	3	5	4	4	5	3	4	38	5	4	4	4	4	5	4	5	39	38																			
ResA	5	4	3	5	4	4	4	3	3	35	4	4	4	4	4	4	4	4	36	35																			
PlyB																																							
ResB																																							
PlyC	5	5	3	5	5	4	5	4	5	41	5	4	5	5	5	4	5	4	5	42	41																		
ResC	4	4	3	5	4	3	4	4	4	35	4	4	4	4	5	3	4	4	4	36	35																		
PlyD																																							
ResD																																							

your short and long game. Up to 500 blank course cards can be entered: each card will save yardage, par, and stroke index information, etc. You can also add notes about each hole or about the course. *GolfCaddy5* works for up to four players at a time.

Overlapping to a large degree is **Keith Ross-Jones'** freeware *Golf Assistant*. This program displays a graphical representation of a score card and also caters for up to four players, with handicaps ranging from 9 to 36. There are menu options and hot-keys for entering par and strokes for all holes and there is full

support for saving scores and course details. A number of different types of competition can be selected and all competitions cater for blackouts. Competitions are implemented as separate OPL modules and can be added to if needed.

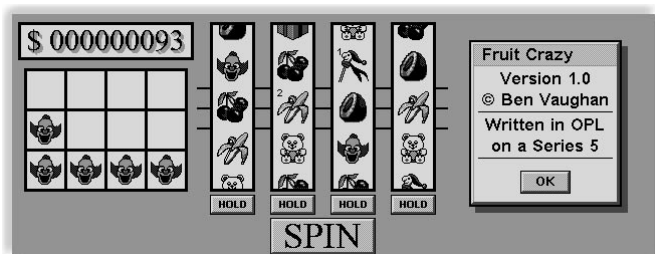
In from the cold

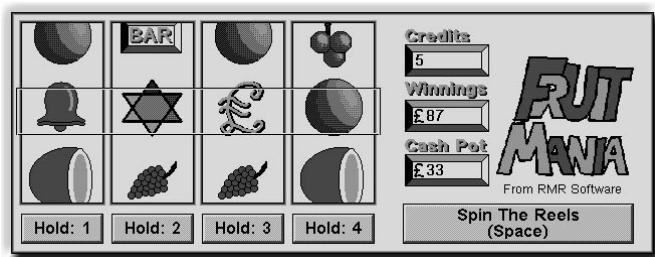
If you'd rather spend your leisure time indoors over Christmas, here are some shareware ideas. *BlackJack 5*, from **John Goss**, is a multi-player adaptation of the classic card game of Blackjack, with a large variety of options to



Psi-Jong—pair-spotting for the eagle-eyed

Sorry—no cash
payments if you
hit the jackpot.
Fruit Crazy





*More spinning
reels for the
Series 5—RMR's
Fruit Mania*

configure the game to your personal preferences. Or perhaps you could take a look at **Ben Vaughan's** *Psi-Jong* (which features 144 Mah Jong tiles placed in various layouts, with the aim being to remove all of them in identical pairs) or *Fruit Crazy* (an excellent fruit machine simulation, with a visually appealing hi-lo card game and a car/jeep/truck race built-in!)

RMR Software have also chipped in for the festive season with two games. Firstly, *RMRBoxx*. This is a shareware of the classic Sokoban puzzler and includes 100 of the original 1984 DOS Sokoban levels and the famous computer generated levels by Yoshio, Hitoshi and Yuzuru. *Fruit Mania* is another fruit machine simulation, though a bit spartan in its interface and features.

Graham Crichton's shareware *SoundOn-SoundOff* is a small utility that you can use to quickly enable or disable the sound on your Series 5. The program places an icon in the Extras bar so you can access it from wherever you are, and a clever feature is that the appearance of the SoundOn-SoundOff icon changes to indicate whether the sound is currently on or off. It's got to be quicker than using the standard Control Panel, which on a machine with Message Suite installed can take up to seven seconds to appear.

Software availability on CD

N.B. These references are to the latest versions mentioned in the article. Prior versions (where applicable) may exist on previous *Palmtop* CDs.

- Rocky - CD05, in \library\games
- Mines - CD05, in \library\games
- Columns - CD05, in \library\games
- Worms - CD4, in \library\vault
- Papillons - CD05, in \library\games
- SpaceVenture - CD06, in \library\games
- LetMail - CD05, in \library\graphics
- PsiGift - CD05, in \library\misc
- Draw5 - CD05, in \library\s5graphics
- RealMaps - CD05, in \library\s5map
- Trivia - CD05, in \library\s5misc
- Movies - CD05, in \library\s5misc
- CodeCheck - CD05, in \library\s5money
- FinCalc5 - CD05, in \library\s5money
- 5Account - CD05, in \library\s5money
- GolfCaddy5 - CD05, in \library\s5games
- Golf Assistant - CD05, in \library\s5games
- BlackJack 5 - CD05, in \library\s5games
- Psi-Jong - CD05, in \library\s5games
- RMRBoxx - CD05, in \library\s5games
- RMRFruit - CD05, in \library\s5games
- SoundOn... - CD06, in \library\s5util

What is shareware?

Written by professional programmers and enthusiasts to meet specific (and sometimes unusual) needs, shareware is often supplied for use on a thirty day trial basis. If you like the software you are then asked to send a payment to the author. Some programs are freeware and don't require any payment at all. Each program comes complete with information about how to install and use it, and how to pay for it.

Where can I find it?

One way to get any of these programs is from the Internet. If you've got access to the web there are several on-line indices which link directly to the relevant author download page concerned. Most mainstream programs (excluding games) appear in the comprehensive Palmtop Software Directory on our web site. This is principally an online listing of popular applications available for all Psion palmtops (a paper version is often included right here at the end of an issue). The version on our web site is the best place to start, as each entry has a hyperlink directly to the program author.

Things are actually even easier if you haven't got Internet access. As long as the program concerned has been out for a month or so, you should find a copy on the latest edition of the Palmtop CD-ROM, indexed into the appropriate category. To help you track each item down, we include a box quoting the folder (directory) name where it's located and the earliest CD number to incorporate the program in question.

How do I use it?

Once you've found the file you want, there are three steps to take:

1. Decompress the files. If you're new to computers you may not be familiar with compression. Psion applications normally have more than one component (e.g. the program itself, help files and pictures). These are normally compressed into one file, which makes them easier to distribute. Shareware is most commonly compressed in 'Zip' format, and you can recognise these by the '.ZIP' at the end of the filename. Before you can install and run the program, you need to extract these files with an 'unzip' program, which is freely available from your shareware supplier. If you use DOS, look for PKUNZIP, Windows users can use Winzip, and Mac users should try Ziplt or the commercial Stuffit Deluxe. You can also unzip files on your Psion without using another computer, using either PsiZip (Series 3, Siena and Series 5) or SSZip for the Series 5.
2. Copy the files. You'll probably now need to transfer the unzipped files onto your Psion. To do this you'll need some external hardware, such as the PsiWin link or a Cyclone drive. Normally, one of the unzipped software files is a text file (e.g. README.TXT), which can be read in any word processor. It explains how the program should be installed and where the files need to be copied to on your Psion.

See 'The Installation Game' in issues 14/15 for a more comprehensive discussion of the above procedures.

3. Install the application. From your Series 3 or Siena system screen, select [Psion]-[I]. If the program was copied correctly, the filename should appear in the list. Select it, press [Enter], and the icon should be installed, ready to run. Series 5 users don't need to do this, as the newly installed program will automatically appear on the Extras bar.



Contribute & WIN PRIZES!
The Star Letter in each issue wins the author a FREE copy of STREET PLANNER or other Psion goodies from our special collection. Prizes are valued at up to £70 each!

Stop complaining!

Your 'Prize letter' in issue 20, 'More Series 5 woes...' probably sums up the situation of a lot of Psion owners that have a problem with their machine—i.e. "There is something wrong with it, but let's moan about it rather than just getting it fixed." In fact the reply from Psion, although understated, gives the solution—contact Psion and moan to them.

I bought my Psion about six months ago, and as part of an offer received a free leather case, in which my Psion lives when not in use. After about a month or so, I noticed that the paint was peeling in the corners.

I was not happy, but didn't feel that it justified complaining to Psion and maybe being without my machine for 2-3 weeks. So I did nothing apart from moan to myself.

The peeling paint gradually became worse, so eventually I wrote to Psion at Red Place in London. About a week later a young lady rang, and told me to call Psion Service on 0800 731 4518.

I rang this number at about 10:30 on a Monday morning. After giving them a few details I was told that a courier would collect my Psion, from my home, that afternoon and they would try to get it back to me within 2-3 days. A courier turned up at about 3:30pm and whisked my Psion away.

Only two days later there was a knock at the door—a courier delivering my Psion, complete with new casing.

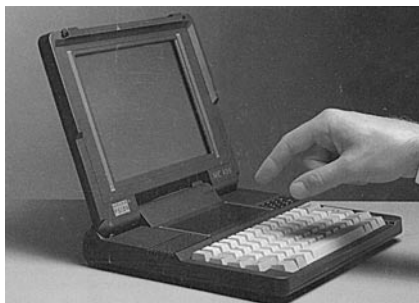
Please publish this experience, so that readers can stop suffering in silence or moaning to you, and actually get their Psion fixed. And who knows, if Psion get a sudden rush of warranty claims, it might make them realise that although they produce an excellent machine, it is by no means perfect.

P.S. the paint on my new case is already starting to rub off at the corners, so I might be using this service again in the near future.

Mark Fairbank
Lingfield, Surrey

Star Letter





The laptop that won't die

I was intrigued to read about Psion's now-defunct MC 400 laptop in your 'A brief history of Psion' article in issue 20. Just imagine using that machine as the basis for a Series 6!

Just add four CompactFlash sockets instead of SSDs, the latest Series 5 software, and keep most of the best ideas from the original MC 400.

What are we left with? A fully PC-compatible machine that works with PSIWIN, a notebook computer with extraordinary battery life and a great screen size and up to 48MB x 4 = 192MB of CompactFlash storage. In short, something that reporters and writers would give their left arm for.

Steven Butterworth
Rokreuz, SWITZERLAND

Whenever we mention the MC 400 within the pages of Palmtop, we always get a passionate response from interested readers. Surely there is a market for an EPOC-based laptop running for tens of hours on AA batteries? The EPOC software is now powerful enough to satisfy the vast majority of laptop computer users, and the prospect for the average businessperson to use their computer for the whole duration of a 10 hour business flight without running out of battery power is a powerful lure. Just

imagine Series 5 applications running on an 800 x 600 pixel screen - Ed.

Technical support?

I am a relatively new Psion user, and found out the hard way just how indispensable my Series 5 became when I lost the PC connection cable. I called the Psion number, and waited on the line for a full half hour. I was ringing at a time of day I thought would be quiet, so I hung grimly on the line. If I heard the polite but utterly useless recorded message about "moving up the queue" once, I heard it a hundred times. The irritation is that you learn you are moving up, but never how many are in front of you!

When I did get through (perhaps those in front just gave up?), I was put through to the 'parts reseller' whom I now understand to be Action Computers. I have great respect for Action, having had dealings with them in my job, but this must have been new staff induction day, as two different sections (including 'Technical Support') to whom I was shuttled back and forth had no idea what I was talking about. They needed Psion's part number. Trouble is, you won't find it quoted anywhere in Psion literature as a separate number.

An email to Psion soon solved the problem. Second time of asking, I phoned direct to Action, got through immediately, and had the part the next day.

The solution isn't for Psion to charge for Technical Support at a premium rate, as seems to have been suggested, it is to resource the service properly. If I was in a genuine queue of customers, the demand for a proper service must have been obvious!

Tom Phillips
Maidstone, Kent

EPOC in the raw?

Congratulations for telling it the way it is in Roger Pemburton's article in issue 20. The Series 5 add-ons for the most part add little to the value of what is the best designed handheld computer on the market. I haven't found an instance yet when I could not accomplish what I need within the framework of the Series 5's own built-in applications.

Saul Leibow
Cerritos, California, USA

But I don't WANT a PC!

I am becoming aware of what I feel is an alarming trend from producers of both software and hardware for palmtop computers.

The whole range of Psion machines are advertised as being compatible with desktop PCs, which is admirable—allowing for projects to be copied onto the smaller machine and worked on while away from the PC, or for data from the Psion to be backed up onto the PC. But, at the same time the palmtop machine is an excellent alternative to the PC for those users on a limited budget or those who wish to use what is generally a less complicated system.

However, it is becoming more and more common for software producers to supply their products on CD-ROMs, which make it necessary to own, or at least have access to, a desktop PC. This week I joined up to Psion's EPOCWorld, and was supplied with a copy of the SDK on a CD-ROM with data that needs not only a PC but also Windows 95. I find it amazing that Psion can supply a product designed to help users of their machines when that product is not even compatible with them.

If this trend continues, makers of palmtop machines will cause themselves more harm

than good by necessitating the purchase of PCs, and therefore fewer palmtops.

Andrew Frazier
Kidderminster, Worcestershire

The lack of cheap write-once or read-only CompactFlash for the Series 5 is partly to blame for this, as it prevents software manufacturers from distributing new programs on CF rather than CD-ROM or floppy disk, unlike Series 3 programs that were often distributed on ROM SSD or OTP flash SSD.

It's a reality that PCs are becoming more prevalent as the years pass, with at least one home in four in the UK now PC-equipped. This must be a contributing factor in what is now becoming an inexorable trend that Psion (and other) palmtop computer users will have to live with.

Purple Software's Cyclone floppy disk drive was a breath of fresh air for PC-less Series 3 users with a need to load software from disk and perform economical backups, but it's a telling reinforcement of the PC takeover that they haven't done the same for the Series 5. If there were enough PC-less Psion users out there you could bet that at least one company would have stepped in with a floppy disk (or even CD-ROM) drive for the Series 5. The absence of any such device some 18 months after the Series 5 launch means that sufficient demand probably doesn't exist.

It's lamentable that owning a palmtop computer without a desktop machine to load software from is becoming increasingly difficult. The sad reality is that the situation is unlikely to improve, making palmtop computers an adjunct to PCs rather than a replacement for them, no matter how modest an individual's real needs - Ed.

An expensive egg timer?

The experiences of various troubled Series 5 users have to be seen in perspective. My company has used Psions from their very inception and is making increasing use of both the 3 and the 5. We have experienced some minor problems with the 5 as you have previously described, but any problem has been dealt with promptly by Psion. This is a marked contrast to various laptop computers we have been using. My latest is a £3,000+ AST, with keys you can no longer read after just 12 months use and an intermittent keyboard fault which requires me to start it up using an external keyboard. It takes more than four minutes to boot up into Windows NT—the only redeeming feature of which is that when in the kitchen it can be used to time a perfect boiled egg!

Windows 95 crashes constantly when printing, as apparently it cannot find the printer files. The time that I have wasted trying to fix these problems doesn't bear thinking about and represents a huge burden on productivity.

The Series 5 and the 3a before that can keep several databases, AGENDAs, budgets, Money and Route Planner in memory at the same time and remain absolutely stable. Eat your heart out Bill Gates—you might be clever, but Psion are in a different league. The Psion operating systems have never failed me.

Such have been the problems with PCs and Windows that given a choice between a desktop, a laptop and a palmtop, I would go for the Psion every time. I can even use it in bright sunlight on the beach!

Barry Sprules
Old Oxted, Surrey

A spot of bad luck??

When I saw the Series 5 advertised in PC World I immediately fell in love with the idea of having a second brain, capable of looking after all my business contacts and general day-to-day appointments.

So on the second of July I merrily left the store with a new Series 5, knowing my life was about to change. Firstly the paint began to rub off—I ignored this as it didn't really cause me any distress, but when the pen refused to pop out I decided to return the machine. It was taken away and returned a week later, but then the touch-screen didn't work. Again the machine was returned and five days later it was back, but without a pen. Also the faults had not been fixed.

A quick call to customer services resulted in my Series 5 being replaced with a reconditioned machine. I didn't really want a second-hand machine as I had paid the price of a new one, but I was assured that it would be just as good.

After a couple of weeks the space bar fell off. It was taken away again and the repair department returned it after six days.

Well—it now looks a mess. The EPOC label on the lid had been replaced and there is a mark where the original sticker was, there are a number of paint chips and the serial number is now missing completely. It looks as though my machine had been kicked down the street.

I have now spent a whole day trying to get a response from either the repair department, PC World or Psion Customer Services. All I want is a new machine—which I feel I deserve after all the hassle and disruption I've put up with. I intend to take legal action if I don't receive a reasonable offer.

Tom Newton
Kettering, Northamptonshire

A Closer Look...

...at some of the newest and most interesting products available for your Series 3 or Series 5



PowerBase

Series 5

PowerBase from Purple Software is the first relational database product for the Series 5 and is designed to be a more powerful alternative to the Psion DATA application. As is evident from the screen shot below this review is based on a late beta-test version, so some of the detail described here might change in the final product, although no major alterations are anticipated.

Relational databases are inherently more powerful than simple 'flat file' databases such as the built-in DATA application. However, with extra power comes additional complexity, and so getting the best from *PowerBase* will require proportionately more effort and understanding from the user. To allow

purchasers to gain some of the benefits quickly, six database templates are supplied to create 'off-the-shelf' databases for management of contacts, wine lists, eating out, collections, price lists and world cities. If you are new to relational database concepts I strongly recommend that you take the trouble to read the manual before using *PowerBase* to manage real data. To go beyond the use of the 'standard issue' databases it will be necessary to understand the underlying principles of creating multiple data tables and setting up relationships between them. For potential power users, thorough study of the manual is mandatory, together with detailed examination of the underlying structure of the supplied templates. Unfortunately the manual does not provide a detailed description of how to set up relationships between tables in a database, a crucial part of the relational database design process. However, if you

PowerBase—the first relational database product for the Psion range



Registered to ple
This beta version expires 06-12-1998

POWERBASE

Copyright © Purple Software Limited 1998
Web: <http://www.purplesoft.com>
Version 1.00B



A sample Contacts database, showing the 'Schema' view to the left

have some previous knowledge of database systems and are willing to persevere then the effort invested should be rewarded by the benefits gained from a more flexible and sophisticated data management system.

Users of DataView Pro for the Series 3 family can buy a 'cross-grade' to PowerBase at reduced cost, but PowerBase is a very different beast to DataView Pro, so the transition will not be achieved without significant effort from users who wish to take advantage of its capabilities.

PowerBase is supplied on floppy disk in EPOC SIS file format, so installation is simplicity itself—the procedure is clearly described in the documentation. Once installed the user has to complete a simple one-time registration procedure.

Getting started with PowerBase is best done by creating a database from one of the supplied templates, or by importing an existing DATA files—see the Tech Topics article on page 89. Creating a database by selecting a template will create all the database tables and relationships and, if required, will initialise the system with some example data. Experimenting with a pre-defined database template is the easiest way to evaluate the relational features and record selection capabilities of PowerBase. Importing one of your own DATA files will create a single table in PowerBase

and will define both a Card view and a List view for the table.

Data in PowerBase is organised into 'Tables' that contain a number of 'Fields'. A wide variety of field types are available to hold different types of data, i.e. Text, Numeric (Boolean, Integer, Floating Point, Currency, Auto-number, Calculated), Date, Time, Memo, Embedded Object and Relational. Links or relations can be established between tables via common relational fields. Typically, relationships between tables are established using auto-number fields. However I found it impossible to add an auto-number field (a field type vital to establishing relationships between tables) retrospectively to an imported data file, or to any other database table that already contained data records.

The screen shot above illustrates a Contacts database created and initialised from one of the templates supplied. Two windows are visible: the left most window is the 'Schema' or tree view present in all databases, and the window on the right shows the 'List view' on the Contacts table. All tables created in PowerBase have two default views, i.e. 'List View' and 'Card View' (equivalent to those provided in DATA). In addition 'Page views' can be created, and the exact layout of all views is user-definable.

For any particular data table the List view and Card view record positions are linked,

*The sample
Contact
database once
again, showing
the List view and
Card view side-
by-side*



so when a record is selected in the List view the same record is made current in the Card view of the same table. In the screenshot above the Card view on the left and the List view on the right are showing the same record. If another record is selected in the List view then the Card view will update to display the newly selected record, again very much like DATA.

The Schema view is the initial point of entry for all databases. When a database is first created from a template the Schema view is shown containing a list of all the Tables. The surprisingly small (and somewhat tricky to select) '+' symbol beside each Table name indicates that the tree can be expanded by tapping the '+' to reveal other expandable branches for Fields, Groups and Views. Thankfully most of the time the Fields and Groups branches can be ignored. Expanding the Views branch will reveal the options for data presentation, typically as a List or Card view, as illustrated below for the Addresses Table. Groups are used to define the exact

selection of records to be shown in a view. Complex expressions can be set up to define exactly which records are to be selected from the Table and displayed in the View, the default formula being 'All records'. Groups are saved as part of the database structure, but temporary ad hoc 'Filters' can be set up for additional record selection as required.

Once the commonly used Table Views have been established and opened for a database they can be iconised on to the PowerBase desktop, ready to be opened up and used as required. Even the Schema view can be minimised if necessary. The screenshot on the following page shows a Contacts database with the Card and List views on the Address and Contacts tables minimised, plus the main Schema view reduced to an icon.

Many of the key concepts, options and configurations were given in the 50-page manual, although the ordering of some sections could be improved and the some are overly technical for the uninitiated. Additional, on-line-



*An address Table
in Card view*

**The PowerBase
desktop with all
selected views
iconised**



help was available via the 'Tools|Help' menu option.

PowerBase is an extensive and complex application with many sophisticated features. Users who are not familiar with relational database design concepts will have to do quite a bit of studying before they are able to set up new linked databases from scratch, though that is also true of other powerful database packages. However, as an experienced database designer I found the user interface quirky and confused. Database definition and configuration facilities feature far too prominently. Most of the time people simply want to search, view and amend their data and will not need to change the various system properties and settings. At times, it seemed that tapping almost anything with the pen would bring up a 'Properties' editing dialog. When first getting to grips with PowerBase I found myself constantly having to dismiss numerous intrusive dialogs. Also, it is very easy to close down the main Schema view, but opening it up again is far from intuitive, with the appropriate menu selection to reinstate it being buried under 'File|Create new!'. Initial access to all data views is through the Schema view, but once you have configured the PowerBase desktop for regular interaction with a specific database application things become a little easier. Data entry for most fields is via 'edit in place'. Data entry for relational fields is particularly confusing until

you become used to the PowerBase way of doing things.

Priced at nearly £70, PowerBase is not going to appeal to everyone, but it is a powerful, albeit quirky piece of software. It will be of most benefit for users who have found their database requirements too demanding for the single-file DATA application. If you feel that you need this kind of database power then turn to the Tech Topics article on page 89 for a more detailed look.

Leigh Edwards

PowerBase

From: all major Psion dealers

Availability: now (English, French, Ger)

Contact: 0171 33877777 (Purple)

Runs on: Series 5

Supplied on: floppy disk

Price: £69.95 including VAT
£49.95 for DataView Pro cross-grade

Quality: 
Value: 

PhoneMan

Series 5

I stumbled across *PhoneMan* while researching the article about mobile phone connectivity elsewhere in this issue. This little gem of a program is the ideal companion for anyone who wishes to connect their mobile phone to their Psion, either with a cable or by infrared.

Essentially, this program has two features: management of your phone's address book, and sending and receiving SMS (Short Message Service) text messages.

When first connecting to your phone, you will probably want to download an existing address book from it. As most phones hold phone numbers on both the SIM card and the phone's internal memory, you are asked to select which one you require. If your phone has no numbers already loaded, then PhoneMan will allow you to merge in a text file of phone numbers from your Series 5's DATA application (for more information on merging data files see 'Working with Data' on page 93).



Transferring a phone's address book to your Series 5

Once you have the phone book loaded onto your Psion, you can add, edit and delete entries, as well as move them to new locations and even dial them. If your phone has

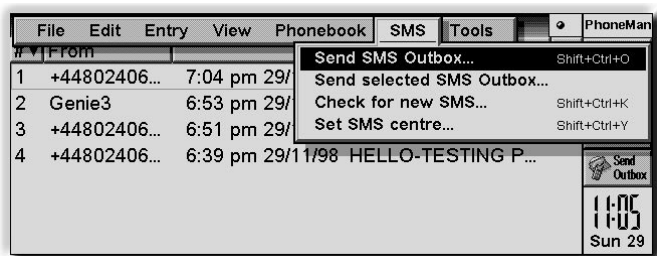
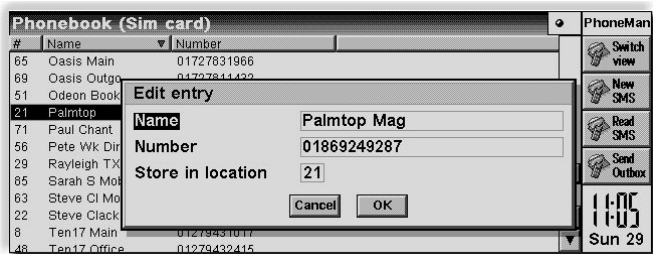
quickdial, you can set up your nine most common numbers too.

Hidden under the 'Phonebook' menu options are two nifty features: a 'Capitalise/uncapitalise all entries' option, and a handy 'Internationalise' option, which adds the appropriate international prefix to your phone numbers. For example, if 'roaming' in Europe, your phone would transmit '+44 1702' for a UK prefix of '01702'.

If you need to send SMS messages to other GSM phone users then PhoneMan is a must. If you're using Psion's Message Suite you'll immediately feel at home, as PhoneMan uses the same 'Inbox/Outbox/Sent items' metaphor. When sending an SMS message, you are prompted for the name of the person to send the message to (you can select a default name, if required), and you then type your message. You can type in one or more messages while offline, then send them later on. SMS normally has a limit of 160 characters per message, but PhoneMan will split longer messages into chunks as necessary. The recipient will then receive the message as multiple items, although the newer smartphones can rebuild this back into a single message.

Using SMS on a palmtop has many advantages, most obviously that of being able to use a proper keyboard to input your messages. Mobile telephones only have a small amount of onboard memory, so there is a limit to your SMS storage capabilities (normally not a problem on a Psion). Also as cut and paste is supported, you can easily grab text from other Psion applications. Users of the Ericsson GS18 phone should note that at present SMS messaging is not possible, although PhoneMan's author, Steve Godfrey, is hoping to implement this in the future.

*Making changes
to your phone
book*



*Pending
messages
waiting to be
sent*

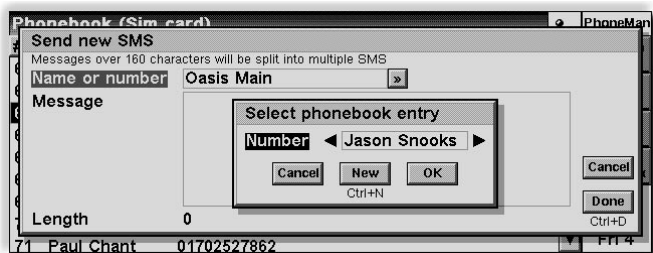
Depending on the model of phone you have, you may find some additional options available. On the Ericsson SH888 it's possible to set the phone's clock, check the battery level, change the welcome message, listen to the assorted ringing tones the phone is capable of, and even compose your own melody from the Series 5. Little touches like this show just how well rounded PhoneMan really is.

PhoneMan is not currently compatible with all the phones on the market, but it is known to work with the following:

- **Ericsson:** SH888, GS18 or 6xx/7xx family (with DI27 plug-in modem).
- **Alcatel:** One Touch.
- **Nokia:** 8810 or 2110/3110/5.1/502/8110 with DTP2 vII Nokia datacard.
- **Sagem:** RD750.
- **Siemens:** SL10.

The software also has a 'Basic GSM' setting, so if you are physically able to make a connection, maybe using the Psion Dacom GSM

*Selecting who to
send a short
message to*



**Select your
telephone make
and model**



Gold Card, then other phones might also work. If your phone isn't listed, then the best advice is to check the author's website for new plug-ins.

For the purpose of this review, both the Ericsson SH888 and the SH788 with DI27 were used without any problems. Remember that if using an infrared phone you need to have Psion's IrDA patch (an integral part of Message Suite 1.52) installed on your Series 5. For information on connecting to your mobile phone, see the feature on page 50.

Overall, this application is very impressive and hard to fault. The only problem I've been able to find relates to the sending of SMS messages when the phone is disconnected, as PhoneMan seemed to have a problem timing out, but this was very minor and will doubtless be addressed shortly.

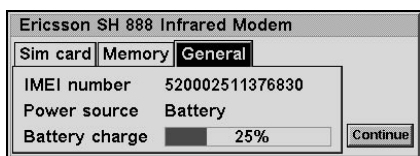
The author has clearly put a lot of time and effort into this program, and it really does shine. Talking to mobile phones is a complex business, which explains why the program is currently being updated and patched every

few days. Indeed, as I have been working on this review, three different versions have been released to address issues with different hand-sets. I'm currently using v1.16F, the December release, which as shareware is due to expire on the first of January 1999.

PhoneMan can be installed manually or with an SIS file, and takes a little over 200K of your RAM. Complete with online help and a fast 'find' option (which searches through the address book and all SMS views), it's something that all serious mobile phone users should try.

Pete Sipple

Please note that PhoneMan does not currently feature on the Palmtop CD-ROMs because of its built-in expiry date.



Specific information from your phone

PhoneMan

From: SG Software

Availability: now (English only)

Contact: info@sgsoftware.co.uk

Runs on: Series 5

Download from: www.sgsoftware.co.uk

Price: £15.00 + VAT

Quality: 

Value: 

Plan5

Series 5

If you've ever been involved in project management of any kind, you'll be familiar with the endless meetings, meetings and more meetings. Each probably interspersed with frantic hours spent on a PC running Microsoft Project, trying to update the master plan with hastily scribbled notes made in the aforementioned meetings.

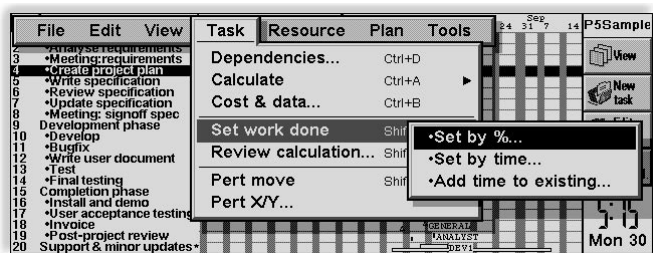
I can't help you out with the meetings (apart from hoping that by being better organised you need less of them), but I *can* suggest that *Plan5* on your Series 5 is an excellent way to stay on top of a project by taking the interactive information into meetings with you, instead of relying on printouts. Real workaholics will also appreciate being able to carry on planning wherever you happen to be, even miles from a power outlet.

As an introduction to this review, I feel slightly miserly in making *any* negative comments at all, as I've found *Plan5* very useful and very flexible. Most of my criticisms of awkward usage come from trying to use a two-pint application on a one-pint screen. It has interfaced very well to Microsoft Project, typically importing or exporting an MPX file in around 30 seconds. Indeed the only problem I had was of my own doing, and the author was

very quick to sort me out by email. He even refrained from pointing out that it was user error and that I obviously hadn't read all his tips on using MPX file transfer in his documentation.

In case you haven't come across one before, a project management tool is one which lets you allocate resources and plan dates in order to accomplish some suitably complex task. For example, creating a new software product. The project might typically involve specification, design, programming, testing and marketing phases. In addition, you will usually have limited human resources available (some of whom may have holidays booked or be working on other things), each working at different rates of pay. The killer punch is that many of the tasks can't be started until others are complete, making managing the project very difficult indeed without computerised help.

Recognising that an example is worth thousands of words, *Plan5* comes with a 20-task sample project, an excellent idea and a good way to see the capabilities of the program without having to worry about how to input new information. In fact, the thousands of words are present too, with a 30 page manual (including illustrations) in WORD format. I especially liked the 'Fast start tutorial' section which comprises the first third of the manual. The thirty-odd topics of online help are also well done and form a useful alphabetical



Working in the traditional Gantt view

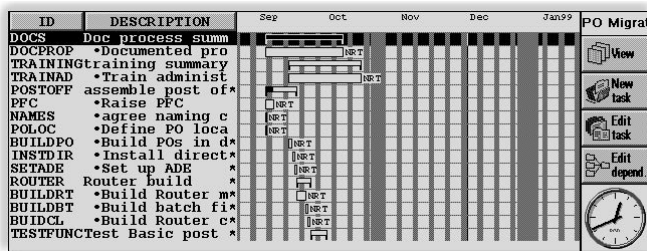
Tasks and settings

ID	DESCRIPTION	WORK	ASSIGNED RESOURCES	ON/AFT.	STA	PO Migrat
DOCS	Doc process summ	5		04Sep98	04Se	
DOCPROP	•Documented pro	5	NRTx0.2	04Sep98	04Se	
TRAINING	training summary	5		14Sep98	14Se	
TRAINAD	•Train administ	5	NRTx0.2	14Sep98	14Se	
POSTOFF	assemble post of*	7		04Sep98	04Se	
PFC	•Raise PFC	1	NRTx0.5	04Sep98	04Se	
NAMES	•agree naming c	1	NRT	04Sep98	04Se	
POLOC	•Define PO loca	1	NRT	04Sep98	04Se	
BUILDPO	•Build Pos in d*	2	NRT	14Sep98	14Se	
INSTDIR	•Install direct*	1	NRT	04Sep98	15Se	
SETADE	•Set up ADE	1	NRT	04Sep98	16Se	
ROUTER	Router build	4		04Sep98	17Se	
BUILDRT	•Build Router m*	2	NRT	04Sep98	17Se	
BUILDBT	•Build batch fi*	1	NRT	04Sep98	21Se	
BUIDCL	•Build Router c*	1	NRT	04Sep98	22Se	
TESTFUNC	Test Basic post *	5		04Sep98	23Se	

summary of much of the manual. Well-explained though Plan5 is, I should warn you that some prior experience of project planning would be very helpful before using the program in earnest.

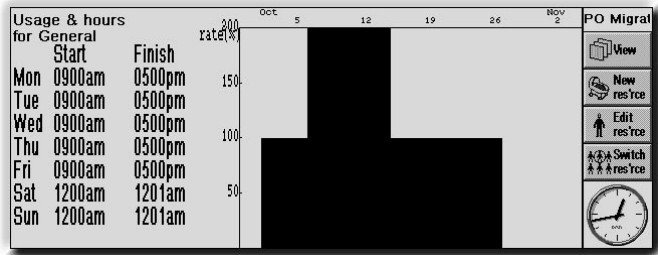
The sheer amount of information that Plan5 tries to display at any given time does mean that compromises have had to be made in parts of the program's interface. For example, the font size used in the Gantt view is very small and can't be zoomed (the 'Zoom' menu commands affect the scale of the Gantt timeline, not the text font used), leading to a rather cluttered display when a complex project is being considered. Pen support throughout the program is fairly rudimentary, with most operations being done using the menu system. Luckily, this is truly excellent and, with the exception of the MPX and AGENDA transfer commands (found under 'Tools...Modules'), every function falls to hand just where you expect it to be.

The core functionality of Plan5 is very impressive indeed. Tasks can be modified and tracked, altering dependencies, due dates and percentage completion, with a good layer of costing detail available. Each task id field is limited to just eight characters, so you need to be fairly well organised before you start inputting information into the program. Unregistered users are limited to 10 tasks, but this is more than sufficient for simple projects and for learning how to use Plan5 more effectively. The dependency of each task upon its neighbours is extremely flexible and any given entry can be set to be dependent upon up to eight others, including the specification of time lags before and after the end of each. Each task can be specified with durations of days, hours and minutes and serviced to variable degrees by up to four different resources (e.g. analyst, tester, programmer, technical author). As you'd expect, resources can be created or deleted, although the terminology used (e.g. 'Kill programmer') is mildly alarming!



*Immense detail
for those with
good eyesight*

Availability of a resource

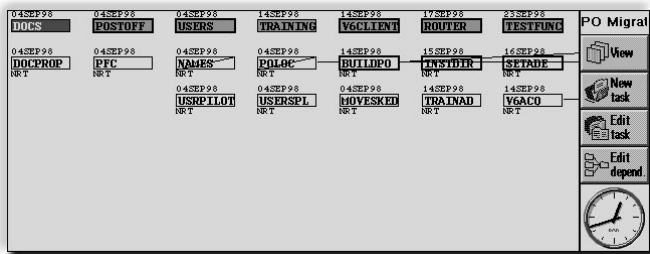


Surprisingly little is compromised in Plan5 when compared side-by-side to Microsoft Project on the PC. A full range of task sorting and searching functions are included, plus the immensely useful ability to attach a proper WORD file (including embedded objects) to any task. Calculation of project completeness, remaining budget and critical path are all painlessly taken care of.

It does help to have planned the project roughly on paper before entering it into Plan5, and there are warnings in the manual about re-arranging the tasks once entered,

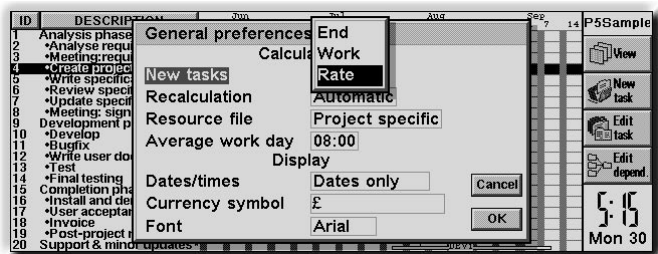
but having said that I moved stuff around, cut and pasted tasks and messed around with dependencies without a problem. From the perspective of someone new to project planning, I've been very impressed and like it a lot. The program has made the management of the project and my team a great deal easier.

In addition to wishing for better pen support, I did feel that other areas of the program could do with a little polish—setting up resources is currently a bit fiddly and printing (though fully graphical) is quite restrictive. These are



A project's Pert chart

One of Plan5's preferences dialogs



minor points, though, and I would have no hesitation in recommending Plan5 to anyone with a Series 5 and an involvement in project planning.

All in all, Plan5 has been remarkably useful. I found it easy to drive once I got the hang of it and found my way around, and over the past few weeks it has probably justified owning a Psion simply as a means to run this program! I used it to plan the complete email migration of 1000 users—and I got the plan out ahead of everyone else. I was also better prepared for the inevitable project meetings as I had the data to hand and could manipulate it on the fly with confidence.

Nick Tile

Plan5

From: usual shareware sources

Availability: now (English only)

Contact: ourworld.compuserve.com/homepages/andyc

Runs on: Series 5 (S3 version available)

Supplied on: n/a

Price: £15

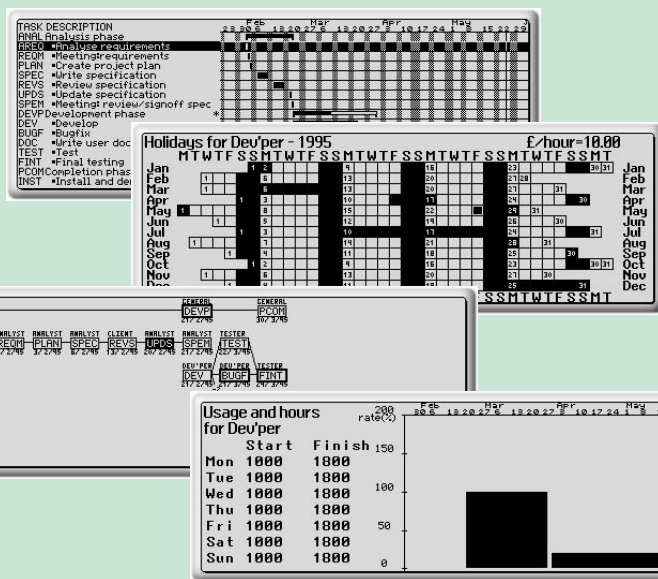
Quality:

Value:



Plan for the Series 3 range

A version of Plan is also available for the Series 3 range, and we covered this in detail in 'Making a PLAN' in issue 4. The Series 3 version sports all the main features of Plan5.



Workabout mx

"You could knock nails in with this," the Editor commented as he passed me the brand new *Workabout mx* for review, "Even using the screen!"

It's true, you really could. Psion Industrial say that the 175mm long ruggedised unit can be dropped from one metre onto solid concrete without harm. I did a few tests of my own (though I wasn't brave enough to try real concrete) with the *Workabout* switched on throughout and the machine just carried on working. Finished in a tough grey plastic shell with a recessed and heavily-protected screen, the second generation *Workabout mx* is in many ways a masterpiece of industrial design. You can spray it with water (though not immerse it completely), freeze it to -20°C , bake it to $+60^{\circ}\text{C}$ or leave it lying around in dusty and dirty conditions and it will, again, just carry on sublimely without a hiccup.

Stock Check	
Type: Wand	v1.33F
Bar Code:	724383333325I
Description:	CD 1999 Party
Location:	
Quantity:	1

BLEEP! - scanning bar codes

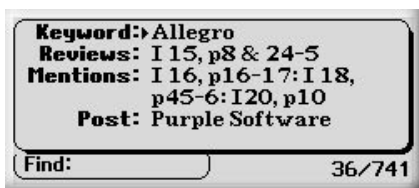
Once you hear that at the *Workabout mx*'s heart is the same 28MHz V30MX processor that's used in the Series 3mx, and that it's got two standard SSD slots, you'll probably think (as I did) that here's the perfect chance to own a Psion that will never break down and which you could probably run over with your

car without causing damage. A closer look at the *Workabout* should dispel much of this misplaced enthusiasm, revealing it not as a ruggedised Series 3mx but as a unique handheld terminal with a character of its own and much to offer.

It's vital to understand that the *Workabout* range is not a consumer-oriented 'one size fits all' product, but a fully modular system that can be easily adapted to most common-place tasks in shops, offices and factories. For example, the review unit was fitted with the 57-key alpha-numeric keyboard (different enough in itself by virtue of being laid out in



Workabout with top-mounted laser scanner



The familiar format of the Palmtop index, Workabout style

A-Z format rather than the usual QWERTY form and for not possessing System or Application keys), but companies can also buy the Workabout mx with a simplified 35-key numeric and function key layout (complete with a large green button for 'Yes' and a large red one for 'No'). Another example is the rubber-sealed internals of the unit, which pop out of the top of the casing at the touch of a button. This can either be left plain or fitted with a tethered bar-code wand or, as with the review unit, an integrated laser scanner.

The bottom of the unit displays equal versatility, with the corporate customers able to choose between RS232, TTL, bar code or IrDA data ports, all running at an mx-like 115kbps. This IrDA port in particular is a stroke of genius, enabling the user to send

information by infrared from the bottom of the Workabout to an IrDA-compliant device hanging from a belt. Each port is protected by a tight-fitting rubber hood when not in use.

If, despite the unfamiliar keyboard, you're still salivating at the thought of replacing a personal Psion 3 or 5 with the Workabout, you should be aware that there are quite a few things 'missing' from the software. DATA is there, large as life, although the smaller screen makes for a lot of scrolling with large records. CALC, OPL and COMMS are also present in fairly complete form. SHEET is included, but it's the original Series 3 'classic' version, not the more elegant Series 3a/3c/3mx upgrade.

The absence of WORD is quite understandable, given the type of keyboard (a user could always type a few paragraphs in the OPL editor if need be), but the omission of AGENDA and TIME seem an oversight. Surely busy factory workers need to note things to do and set alarms the same as the rest of us?

It would however be unfair to major too much on the built-in SIBO applications, for



Two standard SSD slots beneath the pull-out top cover



A custom Workabout specifically for scanning

the majority of Workabouts will be running a third-party application for much (if not all) of their lives. The smaller screen size means that most existing Psion software won't run at all, but this isn't really a problem. Software designed for the Workabout will usually be made in-house in OPL, OVAL (similar to Visual Basic) or C and will be custom-made for that particular company and application. The Workabout also supports a PC-like 'autoexec' startup system wherein applications can be given full control of the machine (meaning no system screen, but also no distractions for supposedly busy employees).

I imagine that planning a 'roll-out' of Psion Workabouts within a company is a huge undertaking. In addition to specifying the

options required on each unit, there are docking holsters and docking stations to think about, plus bespoke software on both the Workabouts themselves and on the company network servers. Training and technical support will probably cost as much again, but the end result is usually worth it if the glowing testimonies in the back of Psion's occasional Psion User mini-magazine are anything to go by.

Whether stock-taking, entering survey results or scanning product bar codes, the Workabout mx range of handhelds make a very impressive company workhorse.

Paul Nelson

Workabout mx

From: Psion Industrial PLC

Availability: now

Contact: 0990 134976 (Sales)

Price: n/a

Quality:



Value: n/a

Flight Manager

Series 5

Anyone who flies on business on a regular basis will be all too well aware of the headaches of flight planning. If you get part way through a trip and find that you need to stay an extra day, you'll either need to call a travel agent to get details of alternative flights, or thumb through one of the bulky and expensive paper flight directories, which you'll need to carry around in your briefcase. Wouldn't it be so much easier to pop out your Series 5, take 15 seconds to look up all the flights that fit within your schedule, then make your preferred selections based upon departure and arrival times, airline, aircraft type, classes of travel available and even details of the in-flight service?

Of course, you'll still need to make a phone call or two to check price and availability and to make the actual reservation, but knowing what's available to you *before* making the call is a great benefit.

Palmtop BV's Flight Manager works from a large database of current flight details loaded onto your Series 5, together with a front-end program to access that data quickly and easily. Although the distribution (and pricing) of updates to the flight data had not been finalised at the time of going to press, it is planned

that updated flight information will be made available at least 2-4 times per year. This will be some kind of subscription service just like the existing flight planning directories.

The program, with around six months worth of test data supplied for this review, took a total of just under 5MB of storage space, containing data for 4,374 airports covering 611 airlines, 249 countries and more than 41,000 flight connections.

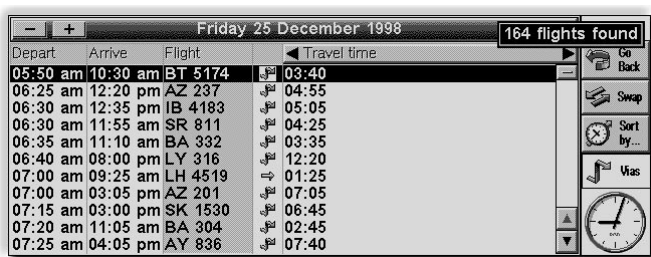
Finding the information you need is as simple as entering the first few letters of your departure point using Palmtop BV's familiar match-as-you-type interface (similar to their Route Planner and Street Planner software), the destination airport and time constraints within which you wish to travel. The simple interface makes it very easy to change details on the fly, backtrack over previous selections, and generally specify your travel requirements in a way that suits you.

There are a number of slick touches in the interface, allowing airports to be selected by their three letter acronym as an alternative to the full name (you can find Charles de Gaulle airport by typing 'CDG' instead of 'Paris'), and flights to be specified by date or time, using any criteria you wish. You can set a particular airport as your 'home' departure point, to be used as a default. Preferred airlines can be chosen from a separate list, and when selecting flights you can elect to



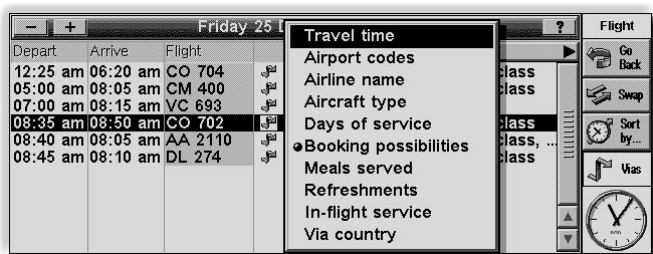
The first step in finding flight details—choosing your departure point

**Destination
selected, with
desired arrival
time set...**



**All flights to
your destination,
sortable by
many criteria**

**You can choose
to display one of
many options in
the right-hand
column of the
main view, and
sort on it too!**

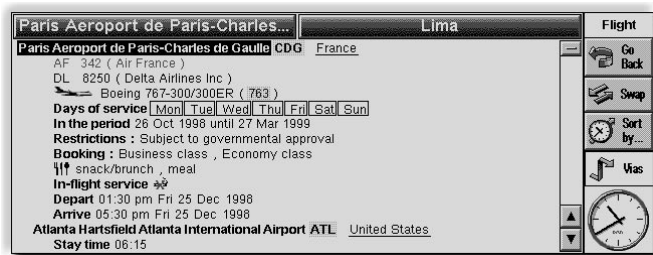


use direct flights only or to display indirect journeys with up to two separate legs.

Once your search criteria have been set, Flight Manager will display a list of all the journeys that match those requirements. This list includes columns for departure and arrival times, flight number, whether or not the flight is direct, and a fourth, customisable column to display travel time (useful for selecting the shortest possible journey times), airport designation codes, airline name, days of flight service, flight booking options (First

Class, Economy, etc.), meal service, refreshments, in-flight services (movies, whether non-smoking flight, etc.), and 'via' countries for indirect flights. It's unfortunately not possible to filter the resulting list to remove flights from the view entirely, but you can sort on any of the criteria, making it easy to group all your preferred journeys together.

Lots of additional related information is available from within Flight Manager. Tapping on any line of the main flights list will bring up a comprehensive summary of all available



Comprehensive summary information for your selected journey, ready to print out

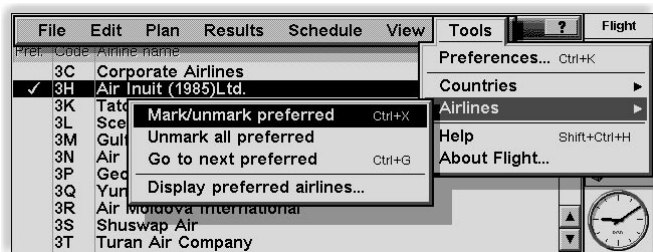
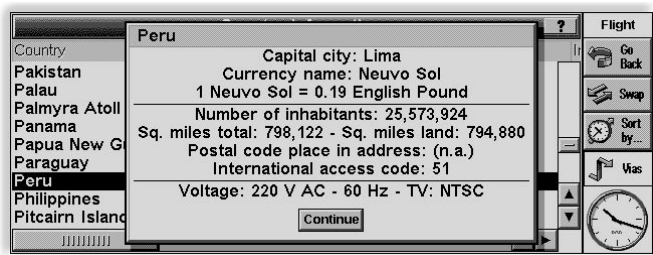
information, including details of connecting flights. This summary can easily be printed out for reference, perhaps to give to a secretary back at the office.

If you're not sure of the best airport to fly into or out of you may wish to browse the database for suitable locations. A quick press of the [Tab] key when selecting an airport will bring up a list of all other airports in that country only.

Once you have decided on your destination, Flight Manager provides a substantial amount

of useful facts and figures for each of the 249 countries in the database. This includes geographical information, nominal currency exchange rates, telephone access code and postal code data, together with the all-important voltage used for mains electricity and the TV system employed. Once again this information can be displayed on screen or printed to a hard copy. This forms a useful resource in its own right, and to have it included in the flight planning software is a major bonus.

Summary information for your destination country



Choosing your preferred airline(s)



Concerning the accuracy and completeness of the data, I planned a number of sample journeys, then cross-checked the details with a travel agent. Flight Planner came out spot-on in every instance.

Although the version of Flight Manager reviewed was a final release candidate, Palmtop BV have not yet finalised pricing details for the quarterly or half-yearly updates, nor the mechanism by which those updates will be distributed. Considering that each update is likely to be at least several hundred kilobytes in size, it seems most likely that the final 'subscription' cost will include updates mailed to the customer on CD-ROM. The initial purchase price of Flight Manager is anticipated to be £49.95 including VAT, which will probably include flight data for the first 3-6 months.

Flight Manager is clearly not aimed at the general holidaymaker who flies a couple of times per year. For those people a call to the nearest travel agent is the most economical solution. But for regular business travellers the ability to keep a comprehensive catalogue of available flights at your fingertips is yet another compelling reason not to leave home without a Series 5, and another feather in the cap of Palmtop BV, whose ever-expanding array of valuable Psion software is helping

to turn the Series 5 into a must-have for so many busy people.

If you are currently subscribing to a book-based flight guide then now is the time to throw away that unnecessary baggage and switch to the altogether more traveller-friendly Flight Manager. Take to the skies!

Steve Clack

Flight Manager

From: Initially Widget Software only

Availability: January 1999 (English)

Contact: 01438 815444 (Widget)

Runs on: Series 5

Supplied on: n/a

Price: TBA

Quality: 

Value: Pricing not yet available

PocketChess

Series 5

This is a pride health warning. Computers can be very good at chess.

If, like me, you fancy you can play a bit and think you know enough strategy and tricks to keep most casual opponents at bay, be prepared for a bit of a shock with *PocketChess*. Like Purple Software's commercial offering (reviewed in issue 13), the combination of good programming and merciless Psion number-crunching power is more than enough to crush people like me. At least you don't have to pay for the ignominy of defeat—Palmtree having generously released this tour-de-force as freeware.

PocketChess comes with eight different skill levels, each preset with different amounts of maximum time for the program to consider its next move. Level 1 is really only for beginners, but has the advantage of moving almost instantaneously, and makes for a very fast and fluid game to fill in a coffee break.

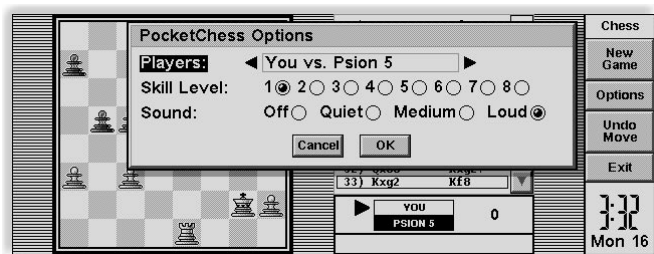
Thinking times increase for each skill level, with 20 seconds per move on level four being a good compromise for a challenging game completed in a reasonable length of time. Level eight allocates PocketChess almost two minutes for every move, which tends to

make it more suited to analysing positions and moves in a postal game with a friend.

Good chess play is not just about raw computer power though, needing a highly optimised logic 'engine' to analyse all the possible moves and find the best one. PocketChess is based on Scott Ludwig's engine, already available in versions for other palmtop computers and much renowned in each case. On skill level four I started the game thinking I would get it flustered with a few imaginative moves, but by move 20 I was rocked back on my heels and fighting for my life. Ten moves later the program put me out of my misery.

There's more than one way to win, though. PocketChess also sports a very intuitive Board Setup feature, in which you can drag and drop pieces around to suit the solution of a puzzle, to study a position in a published game or (ahem) to take unfair advantage of the game by removing its queen from the board...

Atmosphere is always important in a game, and PocketChess has quite a bit of it, with pipe organ snippets of Bach when checking an opponent and a longer section when finally checkmated. The moving of each piece is accompanied by a satisfying clunk and good programming by the authors has ensured that the movement of each piece is as painless as possible, with pieces 'snapping' to legal



Setting up a game

**Trounced
again...**



squares without the player having to 'drop' them with pinpoint accuracy.

Although the moves of each game are echoed in the right hand window pane, there's unfortunately no way of exporting them to another program, which seems an omission that will annoy serious players. Mistakes can be easily 'undone' without penalty, though I haven't made up my mind yet whether this is a good or bad feature. It will certainly be welcome for beginners to the game and together with the 'Hint' facility make PocketChess an essential part of learning the time-honoured game.

Steve Litchfield

PocketChess

From: usual shareware sources

Availability: now (English only)

Contact: www.palmtree.com

Runs on: Series 5 (and other PDAs)

Supplied on: n/a

Price: FREE

Quality:



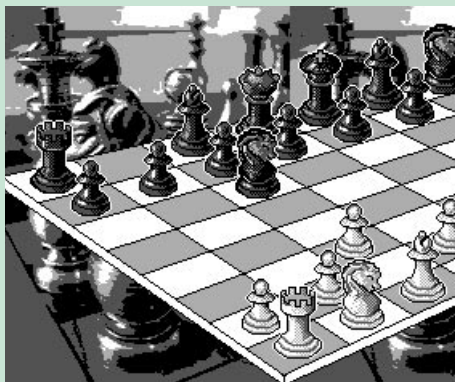
Value:



Head-to-head

In the interests of computer science, *Palmtop* magazine researchers have played several games between PocketChess and Purple Software's Series 5 Chess. In each case Purple's version eventually came out on top, perhaps justifying the commercial purchase price.

It's also worth noting that Series 5 Chess has a variety of board layouts (including three-dimensional) and supports full importing and exporting of board layouts and past games.



Psi Soccer Manager

Series 3a/3c/3mx / Series 5

There are two sorts of people in the world, those who divide the world into two sorts of people and those who don't. Sorry, I mean those who love football and those who don't. I prefer my muddled oafs to play with the oval Rugby ball and I have little interest in football. You might think I'd hate any sort of football management game, but I'm afraid I have been known to spend many hours playing them, and the more I concentrate on the management instead of the match itself, the better. Artamedia have produced a superb implementation of this game for both ranges of Psion.

The software is supplied on floppy disk or SSD (Series 3 range only), along with a small manual. Read it, because there are some handy tips in it, and because the Series 3 version has no help in the game itself. The very first time you start the game you need to enter a code from the manual: you know the sort of thing "what is the fifth word on the tenth line of page 3?" After that, the protection system leaves you alone. You'll need around 250K of space on any drive to

install it, and another 90K (which must be on the internal drive) to hold all the files generated during a game. You also can't switch games without deleting the current one, so you have to concentrate on managing one team at a time. The EPOC version comes as an SIS file, and is easily installed (see page 57).

As soon as you launch the game you know this is something a bit special. Both versions have attractive splash screens and crowd noises to build a bit of atmosphere, and you really feel it's going to be good. It doesn't disappoint.

You first need to choose the team that will benefit from your managerial abilities for the next season, and apparently the player details are realistic. There are also free team updates you can download from the Artamedia web site that set all the teams up to the start of the 1998-99 season if you want to go to those lengths.

Building the data required for a new season takes a little while, but that's all explained on screen while it happens. It doesn't detract from the gameplay, as it only happens once per season. As you might expect, Premier division teams have better players and more money than those in lower divisions, and generally life is financially more secure.



5 Shaun Connelly				Right, Centre, Def			
Form %	51	Speed	18	Red	0	Yellow	0
Fitness %	74	Strength	7	Period suspended	0		
Morale %	80	Skill	8	Contract (seasons)	4		
Shooting	8	Inventiveness	14	Weekly wage	£1,600		
Tackling	17	Games this season	2	Value	£60,000		
Passing	8	Man of the match	0	Assign Position (Tab)			
Dribbling	8	Goals	0				
Heading	6	Penalties	0	Return (Esc)			
Competitiveness	14	Age	28				

Close-up of a player's details (Series 3)

After that, you need to sort your team out, assign each of your players a position on the field, appoint one to be the captain, put players on the transfer list, and so on.

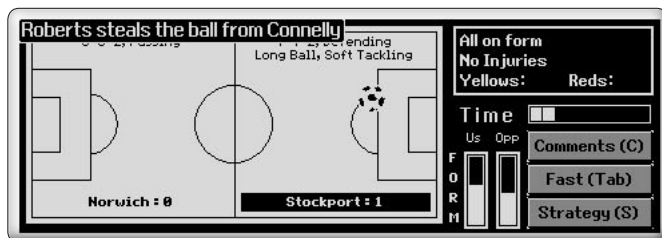
Pressing [Enter] on any player (in *your* team or an opposing one) brings up a screen full of details showing how fit the player is, how gifted they are with specific skills, how many times they've been sent off, etc.

To start with, it's probably worth concentrating on the Form, Fitness, and Morale scores to make your decisions, and then looking at the others as you get more involved in the game.

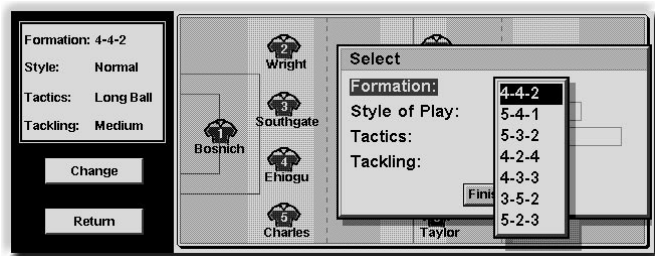
Once you're happy with the team, the match starts. There are choices of display during the match, allowing you to see either an overhead view of play or a simple commentary. You can speed up the play (handy if you aren't very interested in the games themselves), and make substitutions automatically when one of your players is injured.

On the Series 5, the match display gives more detail and a more elaborate commentary, including the weather, referee's actions and the crowd's reactions. It's worth keeping an eye on the other information on that screen, as it gives the time remaining, and details of injuries or form problems and any red

A match in progress (Series 3)



A match commentary (Series 5)



The Strategy screen (Series 5)

or yellow cards your team has picked up. In particular, do make sure you don't leave slightly injured players on for too long, as the chances are they'll get worse and take months to recover! Depending on how things go, you might want to change your strategy or make a substitution, and that can also be done at any time during a match.

Afterwards, there's a summary of statistics showing the amount of possession your team had, the times of any goals, yellow and red cards, and a host of other details. That leads on to the other results for the day, and then the League Table where you see how well your team is doing against all the others.

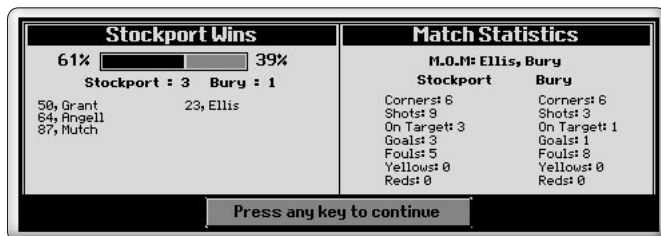
There are several types of national Cup matches as well, giving extra problems in keeping a fit, strong, squad as the season progresses. The aim is to win as many games as possible, get into the Premiership and stay there. You'll get a personal score after each match, and if that drops too far you'll probably be asked to leave the club.

Artamedia tell me that people have found the Series 3 version to be a little easy, and certainly I got promoted from the Third Division to the Second after the first year. That's not the case with the Series 5 version, and it can be a real challenge to keep a fit squad of good players as the end of the season approaches, especially with the transfer deadline coming before the most important final matches. I now find that I recognise the name of a real player on the TV sports reports, and think "He cost me a fortune—got stretched off in the fourth match and was out for the whole season!"

When it comes to tracking down replacements, the search facilities in the Series 5 version allow you to select the division, price range and position of your target player. All you then need to do is agree terms and find the money to pay for him.

There's certainly a lot of depth to the game, and Artamedia are to be congratulated on producing a simulation that works so well on both Psion machines. It's good on the

The post-match analysis (Series 3)



**The League
Table (Series 5)**

The Premiership League Table														Manager
Pos	Team	Pld	W	D	L	F	A	W	D	L	F	A	Pts	
1	Aston Villa	7	3	0	0	8	3	2	2	0	5	3	17	▲ First
2	Chelsea	7	2	1	0	6	1	2	2	0	3	0	15	▶ Next
3	Arsenal	8	1	1	2	2	4	3	1	0	8	0	14	◀ Back
4	Sheff Wed	7	0	2	1	1	2	3	1	0	7	2	12	▼ Last
5	Wimbledon	8	1	2	2	1	2	2	1	0	6	1	12	
6	Southampton	7	1	3	0	2	0	2	0	1	6	6	12	
7	Derby	7	2	0	2	10	7	1	2	0	3	2	11	
8	Tottenham	8	0	3	1	2	4	2	1	1	2	3	10	
9	Leicester	6	2	1	1	4	2	0	2	0	1	1	9	
10	Newcastle	7	1	1	1	5	3	1	2	1	3	4	9	
														Return

Premier division transfer request - Competitiveness in descending order		Manager
20 Steve Watson	16 Joe Parkinson	▲ First
15 Lee Carsley	15 David Howells	➤ Next
15 Paul Williams	14 Steve Nicol	◀ Back
14 Ben Thatcher	13 Alan Rogers	▼ Last
13 Steve Harkness	12 Nelson Vivas	
12 Alf-Inge Haaland	12 Sol Campbell	
12 Christian Daally	12 Bjorn Tore Kvarme	
11 Jason Dodd	11 Philippe Clement	
10 Dominic Matteo	9 Vladimir Kinder	
8 Pontus Kaamark	8 Gunnar Halle	
Request		Jump
		Return

**Entering the
Transfer Market
(Series 5)**

Series 3a/3c, better on the 3mx (thanks to the extra speed), and best of all on the Series 5, with the touchscreen really being used to its best advantage. Obvious keystrokes are also provided if you don't want to use the pen or are running it on a Geofox, demonstrating that there's been a lot of thought put into the gameplay and the user interface. Both are really excellent games, and I can't help but look forward to future products from Artamedia.

Demonstration copies of the two versions are available from the Artamedia web site at www.artamedia.com. The Series 3 version is available on SSD or floppy disk, and the Series 5 version on floppy disk only.

John Woodthorpe

Psi-Soccer Manager

From: Artamedia

Availability: now (English)

Contact: 0181 553 6322

Runs on: Series 3a/3c/3mx / Series 5

Supplied on: floppy disk / SSD

Price: £34.95 inc. VAT (PC disk vers.)
£49.95 inc. VAT (Series 3 SSD version)

Quality: 
Value: 

Starting up:

Mobile connections

Pete Sipple helps to integrate your mobile GSM telephone and Psion computer into the world of data communications. Here's how to fax, email and browse while you're on the move...

How can I use my Psion on the move?

More and more people are finding a need to stay in touch with the office while out and about, and as a result many of us carry mobile telephones to help us work more efficiently. As well as voice messages, many phones can be used to send faxes, receive email, or check up on a client's web site before a meeting.

Will any mobile phone work?

No—analogue phones won't, only those using the digital GSM (Global System for Mobile

telecommunications) network. Check your local telephone supplier if you don't know whether your unit is a GSM model.

What do I need to connect?

As well as your Psion (loaded with the appropriate software), you'll need a GSM phone, a modem (which may also be built into the phone), and a way of connecting them all together. There are four main solutions at present—see the opposite page for a full description.



The FOUR main GSM connection options:

Option 1 – GSM phone with a built-in modem and infrared port

The easiest solutions on the market *at the moment* are the Nokia 8810 and Ericsson SH888. As the modem is already built into the telephone, and it communicates directly with the Series 5 via infrared, you don't need any additional cables. Choose this option for maximum convenience and portability, but note that it will not work with the Series 3 range due to the fact that Series 3c/3mx infrared ports do not follow the IrDA industry standard.

Option 2 – GSM phone with a plug-in modem

Ericsson have produced the DI27, a matchbox-sized modem which plugs directly into the bottom of the Ericsson 600 and 700 series phones. This then communicates with the Series 5 by infrared exactly as per option 1 above. The DI27 is compatible with the following Ericsson models: GF 788, GF 768, GH 688, GA 628, PF 768 and CF 788. As above, the Series 3 range will not work to the incompatibility of their infrared systems.



The Ericsson DI27

Extras: DI27 modem (available from mobile phone retailers for under £150)

Option 3 – GSM phone with a built-in modem (cable connection)

The Ericsson GS18 can connect via a special cable from the base of the phone to your Series 3c/3mx or Series 5. Other mobiles, such as the Ascom Axento, Mondial ML808 and Sagem RD750D/RD750S are theoretically capable of connecting to a 3c/3mx or 5, but cable connection and availability is likely to be a problem.

*Extras: requires a phone-to-Psion connection lead
(GS18 cable from Widget Software on 01438-815444 - £24.95)*

Option 4 – any data-enabled GSM phone, with a PC card adaptor and modem.

This is by far the least convenient solution. From your Psion, you must connect the battery powered Psion PC Card Modem Adaptor (reviewed in issue 11). Into this adaptor you then plug a PC (PCMCIA) card modem. The preferred choice is the Psion Dacom GSM Gold Card range. Typically, you can obtain kits for the Nokia 2110, 3110, 8110 and Panasonic G350, G400, G500. Other cards are available from mobile phone manufacturers, but note that the cards must have the appropriate GSM software included, and will only work with selected types of GSM phones.

Extras: PC Card Modem Adaptor (from Psion retailers at around £99) and GSM PC Card/cables (from major Psion dealers at around £150-£300). Note that 3a and 3c/3mx/Series 5 modem adaptors have different connectors.

What software do I need?

On a Series 5, you'll need the latest version of Message Suite from Psion. Series 3a/3c/3mx users will need PsiMail Internet (for web and email access) and PsiFax (for sending faxes). More details on the software you'll need for web browsing and email can be found in issue 18 (page 69 onwards), and details of fax software are in issue 20 (page 55).

How fast a modem should I get?

Even though your home phone line may be able to use a 56K (57,600bps) modem, the GSM network currently only supports a maximum speed of 9,600bps. Plans are afoot to allow for faster connections as new frequencies are made available, but for the moment don't expect your connection to be fast.

I don't have a Series 5. Can I still connect?

If you have a Siena or a Series 3 classic, then the answer is no. If you have a 3a, then



Psion's PC Card Modem Adaptor

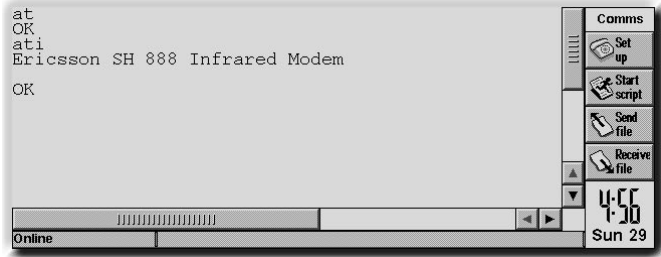


Option 4 on the previous page is the only one available: a PC card adaptor with a 3a connector. 3c and 3mx users can't use infrared, so again, the PC card solution is the one for you, unless you have an Ericsson GS18.

What would you recommend?

Mobile phone technology is moving very fast, so go for the best current solution, which at this moment is an infrared-enabled phone with a built-in modem. PC Card adaptors are messy and involve wires, boxes and batteries. From my own experience, and from the messages in the Internet discussion areas, the preferred solution is either the Ericsson

A simple check with COMMS...



SH888 or the Nokia 8810. If you have a Series 5 then you won't even need a cable to connect to the 'net or send faxes. Unless you already happen to have a PC Card adaptor and/or modem then the infrared route is probably also the cheapest. If you've already got a mobile phone then talk to your phone service provider (the ones you have the contract with, not your High Street supplier) about upgrading the phone. This will often be cheaper than starting a new contract and should enable you to keep your existing phone number. There's normally a nominal administration charge for a handset upgrade.

I've got everything I need to connect. What's next?

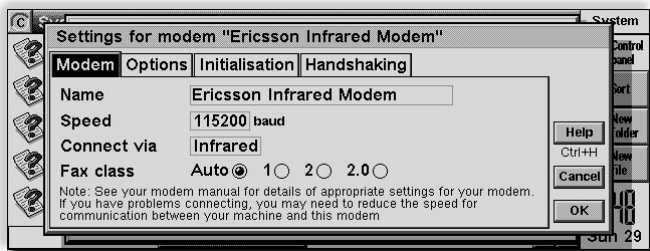
Before you go any further, you need to contact your mobile phone service provider (the people who send you the bill) to have your phone's SIM card 'data enabled'. Telephone calls over the GSM network are handled differently to data calls, and the system needs to know which type you are

using. A service provider takes around an hour to 'enable' you, and it should be free. In most cases, you will be given two new telephone numbers. These are for incoming data calls and incoming fax calls. The network and your phone need to know what type of call it is dealing with (speech or data), so if receiving a fax, a different number is used.

How do I use an infrared modem?

Only Series 5 users can use an infrared mobile phone. You must also be using v1.52 of Psion's Message Suite software, or at least have the Psion IrDA patch installed. To check this, look in the \System\Libs\ folder and check that you have the files 'IrCOMM.csy' and 'IrDA.prt'. If not, then obtain and install either the patch or the latest version of Message Suite, from Psion's web site, the PsiWin 2.2 disk, or any recent *Palmtop* CD.

Assuming you have the right software, here's how to connect:



Setting up an infrared modem in Message Suite

1. Switch on your phone's IR port. With an Ericsson SH888 use the left/right arrows on the phone to scroll to 'Activate IR Port', then press 'Yes'. On the Nokia 8810, press 'Menu' and then '9'. If using a different setup then consult the instructions that came with your phone.
2. From the Series 5 system screen, select [Ctrl]-[L] and set the remote link to 'Off', otherwise the infrared won't work.
3. Test the connection. You can do this through the Series 5's built-in COMMS application ('Extras|Comms'). Position your Psion and the phone so that they are (ideally) 10-30cm apart, with both infrared ports aiming at each other (very important!)

Setting up your infrared modem on a Series 5

1. From Control Panel, select 'Dialling', and change 'Current Location' to 'Mobile' and select 'OK'
2. Now select 'Modems', and press 'New'. Below are the settings for the Ericsson SH888, DI27 and Nokia 8110

Modem

- ▶ Name: as appropriate—i.e. 'Nokia Infrared Modem'
- ▶ Speed: 115200
- ▶ Connect via: Infrared
- ▶ Fax class: Auto

Options

- ▶ Loudspeaker in use: Never
- ▶ Volume: Quiet
- ▶ Pause time for ",": 4

Initialisation

- ▶ Init. (reset) string: ATZ
- ▶ Data init. string: Empty
- ▶ Fax init. string: Empty

Handshaking

- ▶ Flow control: Hardware (RTS/CTS)
- ▶ Terminal detect (DSR/DTR): No tick
- ▶ Carrier detect (DCD): No tick

Then select 'Set up' from the right hand toolbar, and change 'Use comms port' to 'Infrared' and hit 'OK'—you should see the word 'online' in the bottom left of your screen. Now type 'AT' and [Enter]. You should see an 'OK' appear below the text you typed. Typing 'ATI' should give you the name of your modem, e.g. 'Ericsson SH888' or 'Nokia Mobile Phones'. Remember to close the COMMS application before proceeding further.

4. You then need to set up your modem from the Series 5 Control Panel on your Series 5 (see insert to left).

Once the settings have been made, you can try going online. Start up 'Web' from your Extras bar, select 'Open location' from the 'File' menu, type 'www.psim.com' (without the quotation marks) and press [Enter]. It should take 30 seconds or so before Psion's web page begins to appear on your screen. The display on your telephone will confirm your connection with some suitable text such as 'Data call', 'Connected', etc.

Note: if you get an 'Access denied' error, it means that your remote link is not set to 'Off', or you still have the COMMS application running.

How do I connect with one of the non-infrared options?

Connect all the necessary cables and set up your Series 5 Control panel using the settings given in the instruction manual for your modem. If using a Series 3 machine then you won't have a Control panel, but need to set up PsiMail Internet instead. Due to the vast number of modem types on the market, it's impossible to go into full detail here, but a thorough read through the documentation for your modem and software should suggest the correct settings. You will also find some useful pointers in the 'How to connect your Psion to the Internet' feature in issues 17-20.

Is there anything else I should know?

There are few things to bear in mind. Calling from a mobile phone can be expensive, and a local call to the Internet is not necessarily classed as local from your mobile. Keep an eye on the time you're online.

Can I make a data connection from anywhere?

To make a data call you'll need a good strong signal. If your phone shows a low or fluctuating signal you may still be able to connect, but your Internet or fax connection may be cut off part way through a session.

I'm having problems...

Faxing can be less stable than an Internet connection, due to the protocols used, and a strong signal can be critical.

It's also worth noting that Psion's software isn't very good at dealing with a lost connection: if you lose the connection, select 'Disconnect' from Message Suite to instruct the Psion to reset the software. If that doesn't work, exit Message Suite completely, switch off and then start again.



The infrared-enabled Nokia 8110



What new developments are planned?

The world of mobile communications is changing rapidly. Phones which were state-of-the-art a year ago are now obsolete. Here are some developments to watch out for:

- ▶ The 'Soft-modem' from Psion. This 'coming soon' product will allow certain types of mobiles to connect to a Psion without a modem, the work being done by software within your Series 5. *Palmtop* will be covering this product in detail as soon as it becomes available.
- ▶ Bluetooth. Big players such as Ericsson, IBM, Intel, Nokia and Toshiba, are planning a standard which will allow computer and communication devices to connect together easily and effortlessly, without cables or line of sight, using radio links. Expect more news in 1999.
- ▶ Faster mobile communications. Two proposals are being considered: the chaining of mobile phone lines together to increase bandwidth, or to allocate a section of the frequency spectrum for 'mobile multimedia', which would allow higher bandwidth calls from mobile devices.

Further reading

Faxing from your Psion — issue 20, page 52

Message Suite / PsiMail Internet — issue 18, page 72

How to connect your Psion to the Internet (beginners' guide) - issues 17-20

Message Suite review — issue 15, page 18

PC card adaptor review — issue 11, page 20

Installing **Software** the easy way

Steve Litchfield recounts the life and times of Psion's SIS format and reveals how to make your own...



I have to admit I was sceptical when Psion first proposed the Software Installation System (SIS), almost two years ago. Their goal was to make the bane of the new Series 5 owner's life, installing software, absolutely foolproof by wrapping up all the information needed for installation inside a friendly interface.

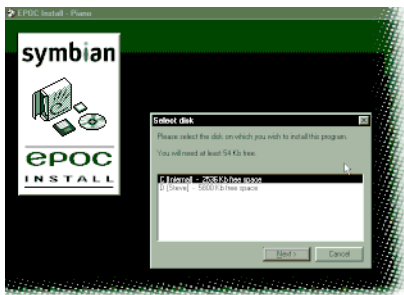
The prospect of being able to dispense with the manual copying of files into multiple destination folders certainly seemed an enticing one, but my main concern was that unless Psion managed to get large numbers of authors and software companies to make their programs available in the new format, SIS would be relegated to just another failed entry in the wastebasket of Psion-compatible installation systems. SIS was also apparently not a compressed format, meaning that programs previously distributed as highly compact ZIP files would effectively double in size overnight, along with downloaders' phone bills.

Ahead of its time

As it turned out, SIS was simply a little ahead of its time. Psion had prototyped the idea in the Windows 3.1 installation program PsiSetup, which relied on a simple text 'script'

file (usually with a 'CTL' extension) to tell Windows where to put each file. Although PsiSetup was embraced by commercial software producers, it never caught on with shareware authors because of the PC/Windows dependence and the relatively huge size of the installer program. Even in its last incarnation, it was also limited to DOS '8.3' character filenames.

The times, they really are a-changing, though. As the millennium approaches, the Series 5 and Windows 95/98 have made long filenames commonplace and practical. 56K modems can be purchased for £50-60, making large downloads from the Internet no more than a few seconds wait, with 'net access itself virtually free (free or local call access points, cheap unlimited monthly accounts). Offline, software is now almost always distributed on CD (at 650MB each), again blowing all the old distribution file size issues out the water. Virtually all Series 5 owners with access to a PC now also use PsiWin 2.1 or 2.2, with built-in support for the new installation system. Macintosh users have similarly easy-to-use SIS support built into PsiMac/MacConnect and Series 5 standalone die-hards are offered a web browser and auto-installer free of charge on the Psion web site.



EPOC Install leaping into action after double-clicking on an SIS file in Windows 95 Explorer

How to use an SIS file

It's taken until mid-1998 for all the above factors to come together, but the end result is quite impressive. Many applications are now supplied in SIS form (if you browse the average CD, floppy or ZIP, you'll see at least one file with a '.SIS' file type) and installation is as easy as double-clicking on them in Windows Explorer or double-tapping on them on the Series 5 system screen. The installation system (usually called 'EPOC Install') will ask any relevant questions such as 'Which disk shall I install to?'. Note that if there is more than one SIS file in the ZIP or on the CD, you may need to install them all. The suppliers normally provide a plain text README.TXT file with more information on this, though it usually doesn't do any harm to re-install components a second time.

If the SIS file doesn't appear to be recognised by Windows 95/98, the usual reason is that you're running an old version of PsiWin (e.g. 2.01). Upgrade to the free version 2.1 and all will be well. If it's the Series 5 itself that doesn't recognise the SIS file, upgrade your Control Panel by running the special INSTEXE.EXE patch that's available from the Internet or on the Palmtop CDs. Don't worry if this file shows up with a '?' icon on your system screen—it is a Series 5 program and will work just fine if you tap on it. After Control Panel has been

'patched' in this way, any SIS files downloaded onto the Series 5 will show up with their own SIS icon (an open box with floppy, CD and CF cards surrounding it). Once tapped on and installed, applications will usually pop up their icon on the Extras bar, at which point you're off and running.

Time for a clear out?

Series 5 owners of a curious nature may notice a new icon in the Control panel marked 'Add/remove'. Tapping on it will bring up a list of programs which have been installed using the SIS method, along with a tempting button marked 'Remove'. The official line from Psion is that you can use this button to remove applications which are no longer needed, and indeed you can. A word of warning though—some applications like to use 'shared' files (e.g. library OPXes, company logos, scrollbar modules, etc.) and, understandably, EPOC's built-in remove mechanism might get a little confused if you remove bits of one third party program that another still needs. The safest way to avoid problems is to turn on viewing of the System folder in the system screen ('Tools|Preferences') and to have a good look around for possible overlaps. Removing a program is usually as easy as deleting its folder in \System\Apps. Shared files tend to be in folders like \System\Opx and \System\Opl, so as long as you don't go into these locations your shared files will be safe.

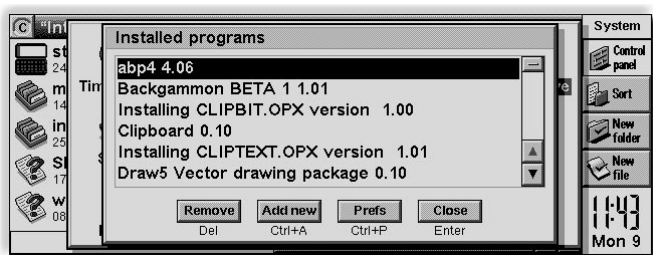
Open files

One unfortunate side-effect of installing an application using SIS is that all files currently open on your Series 5 will be closed down first, though it's only a minute's work to reopen them again afterwards. By taking note of the small caveats above you can ensure that the SIS installation format is one which will serve you and your EPOC palmtop well into the next century.



Installing an SIS file using just the Series 5

*EPOC's Add/
remove dialog—
use with
extreme care!*



For programmers - rolling your own SIS files

If you are an author of EPOC (Series 5 and compatible) programs, you may be wondering how to construct your own SIS files to give your users the benefit of easy installation. Here's an easy 5-step guide:

1. Get hold of the MAKESIS.EXE utility. At the time of writing, this is (officially) only available as part of the commercial 'EPOC World' OPL and C++ Software Development Kits (SDKs), though Symbian plan to make it freely available very soon as part of the trial version of the latter. In practice, if you can't afford to join EPOC World, try contacting another author who already uses the tool and asking nicely!
2. In the same folder as the MAKESIS utility, make a small text file called 'XXXX.PKG' (where XXXX is the name of your application). This 'package' control script tells MAKESIS where each file should eventually go on the user's machine and can also specify version and language information, etc. Use double-digits when quoting the version number (e.g. 5.20 for v5.2, as otherwise EPOC will call your application v5.02....) Here's a simple example of a PKG script file:


```
#{"MyProg"},(0x10008729),5,20,0

"\psion\User\backup\cf32\system\apps\MyProg\MyProg.app"-":\system\apps\
MyProg\MyProg.app"

"\psion\User\backup\cf32\system\apps\MyProg\MyProg.aif"-":\system\apps\
MyProg\MyProg.aif"

"\psion\User\backup\cf32\system\apps\MyProg\MyProg.hlp"-":\system\apps\
MyProg\MyProg.hlp"

"\psion\User\backup\cf32\system\apps\MyProg\graphics.mbm"-":\
system\apps\MyProg\graphics.mbm"

"\psion\User\backup\cf32\system\opl\logo.mbm"-":\system\opl\logo.mbm"
```

Notes:

- a) The long number after the program name in the first line is the **Unique ID**entifier (UID) number allocated by EPOC World (a free service, contact them for details).
 - b) The '!' character in the second half of each script line gets replaced at installation time by the destination drive the user specifies in EPOC Install.
 - c) If you develop software *on* the Series 5 (as I do), doing a backup and then lifting latest copies of each file straight from your backup folders is a quick way to ensure you send out the right versions.
 - d) One of the files you include should always be a HLP 'Help' file, containing the manual for your program.
 - e) Note that in the listing above, all the paired lines of code should be typed as *single* lines in the actual file.
3. In a Windows 95/98 DOS box, type 'MAKESIS XXXX.PKG' to construct the 'XXXX.SIS' file itself.
 4. Make up a suitable 'README.TXT' file, containing a brief description of the program and your installation instructions. Make sure each line is properly terminated with carriage returns *and* line feeds.
 5. Zip the SIS and TXT files together (including any library OPX SIS files that are also needed), for sending to the shareware library or for download by your users. Make sure that you *don't* include folder/directory information, as that's all taken care of now within the SIS file itself.

The above steps are the bare minimum for a professionally presented application. If you join EPOC World and get one of the SDKs, you'll find a lot more documentation on MAKESIS, including how to handle the 'shared file' syndrome more elegantly and how to include support for multiple languages.

Advanced spreadsheet techniques

Using logical functions and cell replication to construct a working stock control system

by Steve Litchfield

Welcome to the first in a series of tutorials aimed at those of you who'd like to make more of **SHEET**. I'm assuming that you've been following all the articles on **SHEET** in the last three volumes of *Palmtop* and have mastered simple tabular layouts, basic formulae and that you know your way round **SHEET**'s menus and dialogs.

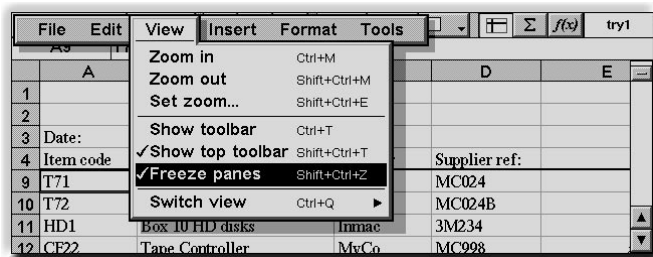
One thing I'm *not* assuming is that you have a Series 5. Everything in these tutorials will work just as well on the Series 3, Siena or Series 5. So SIBO users shouldn't give up just

because I've chosen to do my screenshots on the '5'.

Making a working stock control system in **SHEET** within a single four page tutorial. Sound tricky? Not at all—most of the operations needed will be very familiar to you by now. My aim is to provide an imaginary company (Acme Ltd) with a way of tracking the number of items in stock and their combined value, plus an automatic calculation of how many of each item need to be reordered and the expected total reorder cost.

A4 Item code				
A	B	C	D	E
1	Acme Ltd Stock Control			
2				
3	Date:	12/07/98		
4	Item code	Item description	Supplier	Supplier ref:
5	QX112	Case style 1 Black	MyCo	MC102
6	QX201	Case style 2 Black	MyCo	MC132
7	QX202	Case style 2 White	MyCo	MC133
8	T70	Wideet (small)	MyCo	MC023

Laying out the first few columns and rows with imaginary data



**Making the
most of SHEET's
Freeze panes
(Titles) mode**

Step by step

Create a new SHEET on your Psion in the usual way. Let's start by laying out a table for our stock items. I've added a few blank lines before the start of the table, which we'll fill in later on. Cell B3 is just set to '=**NOW**' and will always show the current date. Columns should be set up for item code, description, supplier and supplier reference (which is usually different to your own internal code system). Fill in some imaginary items so that we've got something to work with.

You won't need it yet, but do bear in mind the 'Freeze panes' ('Titles on' on the Series 3) command, which will let you scroll large numbers of rows of information underneath some stationary column headings.

How much?

Of course, the biggest thing Acme Ltd need to know at any time is the total value of the items currently in stock (the money which is

effectively tied up in inventory). To calculate this figure we need to set up a few more columns. I've added one called 'Buy-in price', representing the cost of each item from the relevant supplier, and made up some suitable numbers. It's a good idea to format the numbers in this column as 'Currency', so highlight cells E5 to E20 and use the appropriate 'Format' command. There's no reason why you should stop at 20, but this is only an example SHEET and we won't need many rows—real life spreadsheets might have hundreds.

The second column needed is of course the quantity of each item actually in stock, which I've put in cells F5 to F20. The inventory value for each item is then just going to be column E multiplied by column F, and I've stored the result of '**=E5*F5**' in cell G5. To duplicate this formula down the spreadsheet, just use the usual trick of 'Copy'ing the cell to the clipboard, highlighting cells G6 to G20 and then using 'Paste'. Back up in cell C2 we

**Stock items
neatly
accounted for
and totalled**

stock.s5						
C2		=SUM(H5:H18)				
B	C	D	E	F	G	
2 value:	£394.00					
3	12/07/98					
4 Item description	Supplier	Supplier ref:	Buy-in price	No in stock	Stock value	
5 Case style 1 Black	MyCo	MC102	£25.00	5	£125.00	
6 Case style 2 Black	MyCo	MC132	£25.00	2	£50.00	
7 Case style 2 White	MyCo	MC133	£24.00	8	£192.00	
8 Widget (small)	MyCo	MC023	£1.20	102	£122.40	
9 Widget (medium)	MyCo	MC024	£1.25	34	£42.50	

can now put in a formula of `'=SUM(G5:G20)'` to give Acme Ltd the total inventory cost it needs.

Keeping up stock

In a real business, those blasted customers do keep wanting to buy things, and the number of each item in stock will quickly fall. Depending on both the cost of an item and the demand for it, we can make a guess at a minimum stock level needed to ensure that we don't run out while waiting for deliveries. With a bit of clever spreadsheet programming we can get SHEET to not only work out how many of each item we need to reorder, but also help us write out the purchase order and show how much it's all going to cost.

Let's entitle column H 'Minimum stock level' and make a few guesses at sensible numbers for our imaginary Acme products, some higher than the actual stock level and some lower (to make things more interesting). Column I is just a simple bit of subtraction, calculating the 'Stock Deficit' with `'=H5-F5'`. Although we *could* roll this subtraction into the formula we tackle next, I often find it helps to use different columns for each bit of a complex operation, as it's easier to get a good feel for whether or not the numbers are sensible.

Rocket science

Now for the really clever bit. It's all very well having a 'deficit' number and trying to scan down a line of numbers to spot the positive ones, but SHEET has the ability to make things much easier for the poor stock-keeper. We're going to use a 'logical' function, i.e. a cell whose formula can direct it to either one of two calculations or states, depending on the value of a different cell. In our Acme Ltd case, the idea is that column J ('No. to reorder') should be blank except where the stock deficit is positive, in which case the deficit is displayed.

The magic formula for J5 is `'=IF(I5<=0,"",I5)'`. The IF logical function always takes three parameters: the first being the 'condition'. If the condition is true, the cell is set equal to the second parameter, otherwise it's set to the third. In plain english, 'If the stock deficit (I5) is negative, display a blank cell, otherwise display the deficit'.

The aim of this part of the spreadsheet is to help the busy stock-keeper place orders for replacement stock, so let's help out even more by replicating column D in column K, thus setting the correct supplier's reference code conveniently against the number of each item to order. Don't be afraid to replicate information around a spreadsheet if it's going to make reading the SHEET easier—as long as you're simply pointing the replicates to

Creating a little spreadsheet magic—now you see it, now you don't

Helvetica	10 pt	B	<i>I</i>	<u>U</u>						<i>f(x)</i>	stock(01).s
J5	=IF(I5<=0,"",I5)										
	F	G	H	I	J	K					
3											
4	No in stock	Stock value	Min stock level	Stock deficit	No. to reorder						
5	5	£125.00	3	-2							
6	2	£50.00	3	1	1						
7	8	£192.00	10	2	2						
8	102	£122.40	100	-2							
9	34	£42.50	30	-4							
10	89	£126.38	80	-9							

Using logical functions to keep the spreadsheet as tidy as possible

Arial 10 pt B <i>I</i> <u>U</u> Σ f(x) stock.s5					
L6	=IF(I6<=0,"",E6*J6)				
	H	I	J	K	L
3			Reorder cost=	£73.00	
4	Min stock level	Stock deficit	No. to reorder	Supplier ref	Expected cost
5	3	-2		MC102	
6	3	1	1	MC132	£25.00
7	10	2	2	MC133	£48.00
8	100	-2		MC023	
9	30	-4		MC024	
10	80	-9		MC024B	

Logical functions (Sheet)
 The logical functions are as follows:
 FALSE returns FALSE or 0.
 TRUE returns TRUE or 1.
 IF(x,then,else) where x, then and else may be cell references, values or expressions. Returns the value of then if x is non-zero (true), or the value of else if x is zero (false).
 Sheet has 3 logical operators:
 AND: use this to link more than one condition in an IF expression where both conditions must be true.
 E.g. =IF(D2>2000 AND D3>15000,"Taxable","No")

Graphs (Sheet)
 Information functions (S
 Infrared (Sheet)
 Inserting cells, rows &
 Keypresses (Sheet)
 ● Logical functions (Shee
 Lookup functions (Shee
 Lump sum investments
 Mathematical functions
 Operator precedence (S

Help
 Quick Find
 Find in all text
 Print
 Go back
 12:04
 Tue 8

Find: (sheet)

Prev
 Next

 24/38

Exploring SHEET's wealth of functions

the original 'master' cells (as here), you don't have to worry about keeping two sets of data synchronised.

Logical again

A slight modification of the original logical function will do nicely for column L ('Expected cost'). We can set L5 to be '=IF(I5<=0,"",E5*J5)', again ensuring that the reorder cost only displays where there is actually stock that needs ordering. Wherever there are numbers, a total is always a good idea, and this is no exception. By setting cell K3 up as '=SUM(L5:L18)' we can calculate the total expected cost of reordering items to bring Acme Ltd's inventory up to scratch.

We've used logical functions in this example as a way of keeping the spreadsheet tidy, by preventing zero and negative numbers from displaying. There are many other uses for logicals in SHEET and, together with lookup and text functions, they have the potential

to turn Psion's spreadsheet into a simple programming system. Indeed, on the PocketInfo web site there are examples of fairly complex applications (would you believe a project planning system, complete with Gantt chart?) written in nothing more than standard Psion SHEET.

Over the next few issues I'll be looking at more advanced functions, each time aiming to provide you with a spreadsheet that actually does something useful.

PocketInfo can be found on the web at www.pocketinfo.org.

Working For a Living - The Teacher

The latest in our series looking at how Psion palmtops are used in real-life professions

by John Woodthorpe



Introduction

This instalment in the series looks at how those involved in teaching make use of Psion machines. Unlike the medical example covered last time, there aren't a great many specific third-party applications to help teachers, but there is a great deal that can be done with a combination of built-in software and a few freeware, shareware and commercial programs, adapted as necessary. Firstly, it's important to say a little about the support that Psion, Acorn, and Xemplar have given for the use of the SIBO machine in schools since the days of the Series 3.

The Pocket Book

Educational uses of Psions have a fairly long history, with applications and machines being produced specifically for school use. A collaboration between Psion and Acorn led to the development of the Acorn Pocket Book range of re-badged Psion computers, and their use, mainly in UK schools. Initially these were Series 3 machines with cut-down software (no AGENDA or OPL, no start-up password, no financial functions in SHEET, but the addition of a spell-checker) and the Acorn badge on the front. More recent machines have been

enhanced in some way with extra features, and so the Pocket Book II was a re-badged Series 3a with more RAM than the Psion equivalent of the time, and a spell checker in ROM (again before it was included with the 3a). The Xemplar Pocket Book III (released in February 1998) is based on the Series 3c with the serial port speed boosted to that of the Series 3mx. The Pocket Book III has now been replaced by the Pocket Book 3mx. As you can see, the educational machines have sometimes preempted features of the next Psion model, providing a useful indication of what might come next. Schools have been able to get reduced prices for 'Class packs' of machines and for some of the software designed for them.

Palmtops in schools

With the Acorn and Xemplar machines included in the Tesco supermarkets' 'Computers for Schools' promotion in the UK, many schools have opted for the Pocket Book machines and have spread their use to the very young. Children really take to these machines, and find the small keyboards ideally suited to their typing skills and smaller hands. I remember visiting a local school on an open

evening and seeing an entire maths class using Pocket Books to learn about interpreting data using spreadsheets. Other examples include their use in English classes to record information and prepare essays away from the classroom. A couple of these are included on the Education Resource housed on the ArmLink web site: www.armlink.ndirect.co.uk/educ and further illustrate the value of the SIBO machines in education.

Many teachers testify to the increased level of interest that the children show when they're seen to produce a palmtop and start typing on it during a lesson. Whereas a laptop might be felt to be threatening in some situations, a palmtop is an object of fascination, and some teachers make use of that in working with children with disabilities or with a history of disruptive behaviour. The power of a palmtop isn't just measured in Megahertz and Megabytes, but also in the increased sense of independence and self-worth it can provide to those students who use it.

Teachers' use

Many teachers are buying the machines for themselves and using them in data collection and interpretation as part of their daily activities. These include such things as recording and analysing scores, and producing reports. Nstore (reviewed in issue 19) is a commercial application for doing that on both EPOC and SIBO machines. It links in with Acorn and PC applications, allowing others to access that data

on a desktop machine to prepare reports or monitor progress throughout subsequent years. Nstore has won awards for its education uses, is well-suited to the National Curriculum used in England and Wales, and comes complete with a stock of phrases that will be very familiar to parents of children in those schools.

With a bit of effort the built-in applications can be combined with freeware or shareware to do a very similar job. As examples of this, I'll show how I record the information I need to gather as an Open University tutor. Before that, we'll look at how George Cooke, a primary school teacher in the UK, uses a Series 5 in his day to day work.

A Primary teacher's Series 5

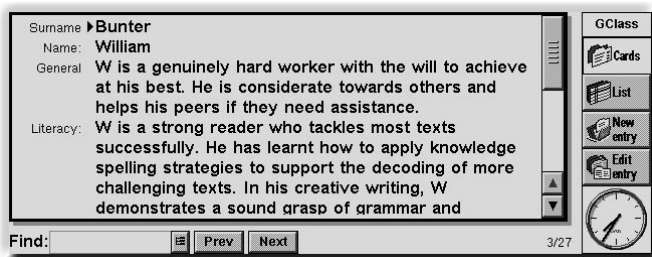
Teachers need to record what sometimes seems to be an ever-increasing range of information, and a palmtop computer can be very helpful in automating this process.

The screenshot below shows an example of information stored in a SHEET file. The 'Freeze panes' option means that the names list on the left hand side of the frame can always be visible as the window is scrolled sideways. The dates have been pasted in automatically with the shareware Macro 5 in the format illustrated to avoid confusion with the SHEET calculations. In other words, using '11/12/98' would give a division calculation rather than just appearing as the date, and using the 'date' format would only allow a single entry. The

	A	L	M	N
1			s=swim m=med	
2			else=PE/Games	
3	Name	Responsibilities	No Kit	General
4	Bacharch, Burt	Equipment mon	:07.09./	Bright & adaptable
5	Brooks, Mel	Music mon		Reading shakey/ a bit l
6	Brooks, Garth	Sink mon	:05.10./	Dad needs informing/ K
7	Crosby, Bing	Guitar mon	:07.09./10.09./04.11/	Head Lice week 1/ Graz
8	Dion, Celine	Music mon		Antennae/ Keen on ICT
9				IEP/ Maths good/ Appli

*A class record in
SHEET*

A pupil's record in DATA



day/month format used here also avoids needless repetition of the year.

Initially, Class Lists may be imported to DATA from other spreadsheets in CSV format.

In the screenshot above the ‘View card browser’ option, which is very useful for quick navigation, has been turned off to show more of the record detail. Using a DATA file with the fields set to ‘Memo’ allows lengthy entries in each section, and the teacher can add running notes as they observe and assess the pupils. In the example above, the record starts with the ‘Core’ subjects that all children have to study.

When reports are due, text can be highlighted, transferred to WORD using 'copy' and 'paste', and exported to a desktop machine for printing. In this case, the information being copied is formative assessment notes which can be edited as required, avoiding the need to rewrite the record from scratch.

Of course, the DATA application can also be used to store marks by having fields set as

‘number’ or ‘floating point’ types. This can be exported as a CSV file, or CSV data imported, depending upon the requirements.

Below is a screenshot of a SHEET file used to track reading groups with scores recorded as National Curriculum levels plus a finer grading. Thus 4.1 here represents a child just on Level 4 and 4.5 is the top of Level 4. Another code has been used to distinguish if a child has read the text easily or with difficulty—hence e4.1, etc.

Macro 5 has completely changed the way George uses his Series 5. It makes light of formerly time-consuming chores such as searching through disk structures to find applications and opening favourite applications after a backup. Macros were covered in depth in issue 19. George finds that he is using them more and more, and has set up macros for all of the following tasks:

- To open all the different pupil information files in one go.

Start5	Macr	Eng	HMW	read	SCIG	Spell	Tabl	GCla	Scho	pad	SJa	Assi	MatG	Stati
A		D	E			F	G	H	I	J	K			
1		24/09/98 Reading Age (Safford C)	Week beginning=> e= easy, o=OK, d= difficult, h= problems			28/09/98 War & Peace Ch7	03/11/98 War & Peace Ch8	09/11/98 War & Peace Ch9					 Sheet	
2													 Graph	
3	Name												 Find	
7	Prestley, P						e4.1	e4.3						
8	Sarandon, S	10_6+			4.3	e4.4	e4.5	e4.5						
9	T-Bons, J	10_6+			4.4	e4.4	e4.4	e4.5						
													Stationery	
	MassTemp	TopicWebTemp	SchLett	AddTemp	TerPlantemp	LiTemp							 New	
	RegGentemp	AppRC	PerLettTemp	ootyAwayTer	VisitTemp	NetballTemp							 File	

Tracking progress with SHEET

- To insert commonly used text in letters and reports, such as the school or teacher's contact details.
- To insert the current date in a variety of formats into WORD, SHEET or DATA.
- To open standard folders such as those concerned with planning for the term or where useful SHEET files are stored.
- To start applications without using the Extras Bar.

The Start 5 selection bar at the top of the screen on the previous screenshot is used to switch between open files very easily with one tap of the pen.

Stationery Pad is shown at the bottom of the same screen, providing an 'Extras'-style bar from which pre-defined templates can be selected.

You can see more of George's experiences with his Series 5 on his web site at www.geocities.com/SiliconValley/Garage/1900/

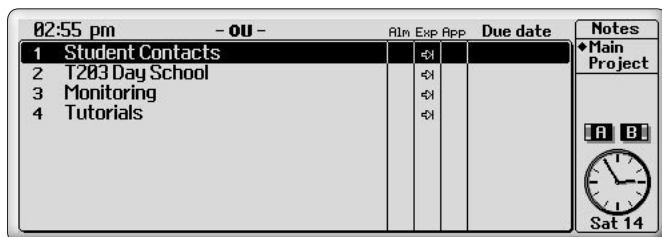
University Teaching

In one of my other lives as an Open University tutor (or Associate Lecturer as we're now officially called) I have slightly different requirements to people in other fields of education. For one thing, I don't see my students very often, and in some cases I never have any face-to-face contact with them. That's especially true for the new 'You, Your Computer and

the Net' course (T171 in OU parlance) that is being piloted in 1999. It's taught mostly via electronic means including conferencing, web-delivered material and email, with telephone support as needed. One of the requirements of any OU tutor's job is to log contacts with each student. The Open University provides an A3-sized paper form to record them, along with the dates assignments are received and the marks awarded. We also need to note any special requests from students to submit their assignments late, or any difficulties that might cause the student problems later in the year. The paper version is fine, but I've been keeping those records electronically for many years. Initially that was on my Series 3, then the 3a that replaced it, and now the Series 5. I keep several records:

- Dates of tutorials and submission dates for assignments.
- Names, addresses, and other contact details.
- Assignment scores.
- Outlines of telephone conversations, letters, emails, etc.

On the Series 3a, I gradually evolved a way of doing this using AGENDA for the first requirement, then DATA and SHEET for the second two, and finally Purple Software's Notepad Deluxe to be the contact manager and link to the others. As Notepad stays open all the time, I have assigned [Ctrl]-[AGENDA] to go straight to it. In this way I have easy



Notepad with high level headings

A student contact record

Dostoyevsky, Fyodor		Notes
Rang with a query on 7 Feb. 8 March - asked for late submission for TMA 1 18 March rang - asked for help with literacy problem 13 May rang - query about Summer School 25 Aug emailed - query about Exam arrangements		Normal Outline [A] [B] Sat 14

access and can make notes while answering the phone.

Now when a student rings up, I can quickly refer to the notes I made the last time we talked and try to deal with the query as smoothly as possible. Of course, the fact that I always take my Psion to tutorials and use it as a clock to help me keep an eye on the time, means that I can also refer to any of the information it contains and update it on the spot if necessary.

Moving to the Series 5 in the middle of last year meant that I had to rethink some of that approach, mainly because the EPOC version

of Notepad is only just becoming available. I'm still experimenting with moving back to it, but the approach I've taken so far uses AGENDA, DATA and SHEET exactly as before.

The extra 'memo' field in Series 5 DATA is invaluable for recording the basics of any student contacts, as it is effectively unlimited in size. That means I now have the contact history and contact details for a student in the same file, simplifying the process a little.

By basing everything around the Series 5, I can use Message Suite to keep in email contact with students when I'm away from home for

A SHEET file of assignment scores

115	=STDEVP(B15:G15)							OU TMA
T203	TMA 1	TMA 2	TMA 3	TMA 4	TMA 5	TMA 6	Mean S.D.	
Lee	55	47	49	65		54.00	7.00	Sheet
Marler	85	77	63	42	92	71.60	17.75	Graph
Morris	88	82	68	66	78	64	74.33	8.90
Mullet	73	67	77	76	73	79	74.17	3.85
Rathbone	95	94	87	92	81	75	87.33	7.27
Stewart	72	61	73	77	75		71.60	5.57
Thomson	87	89	86	78	77	81	83.00	4.58
West	50	51	30	59	41	75	51.00	14.04
Mean	79.06	74.81	71.61	65.41	70.47	71.21	71.82	10.10
S.D.	11.97	13.99	13.61	17.95	12.46	11.38	8.93	5.69

Name:	Dostoyevsky, Fyodor	Ou Cards List New entry Edit entry
Home:	0123 456789	
Work:	0987 654321	
Address 1:	25 Tolstoy Mews,	
Address 2:	Cirencester, Gloucestershire	
Course:	T191 1998	
Student No:	P12345678	
Email:	fd23@student.open.ac.uk	
Contacts	Rang 15/4 - very busy and thinking of withdrawing	
	Rang 20/5 - catching up. but needs another week to	
Find:	Prev Next	10/44

A student record

any length of time and load some of the course material onto the Psion for reference. That's especially true of the web-based material, which I have downloaded and copied to my Series 5 so that I can refer to it off-line.

And finally...

Having established earlier that George and I have different needs in our teaching, and that we work in different spheres of education, we do seem to have used some of the same techniques. I'm going to experiment further in following his methods for some of my record keeping, seeing if they help me to keep better track of the things I need to monitor.

As mentioned in issue 20, it is very important to make sure that you comply with the terms of the Data Protection Act (or whatever legislation applies in your own country) if you adopt any of these techniques. If in doubt, consult the educational institution you work for to see what they advise.

Software availability

NStore - H.S. Software - 01792 204519

Macro 5 - www.geocities.com/SiliconValley/Pines/1215 , or on CD02 onwards, in \library\s5util

Start 5 - www.rosenheim.baynet.de/~apemsel/ps5on.htm , or on CD06 onwards, in \library\s5util

Stationary Pad - www.mcaleely.com/freeware , or on CD02 onwards, in \library\s5util

Notepad - www.pelicansoft.com , or Purple Software on 0171 3877777 for Series 3 **Notepad Deluxe**

Psion ART

Katie the squirrel - created by Carl Reader using Series 5 SKETCH



The 3-plan diet

Glancing a wistful look at the 3mx? Here's how to migrate your data back from a Series 5...

by Steve Litchfield

I think it's fair to say that moving in one direction up the Psion family tree is fairly easy. The Series 5 comes with a version of PsiWin that knows all about Series 3 formats and is quite prepared to convert them to shiny 32-bit equivalents. What is decidedly more tricky is going back in the other direction.

Why would anyone want to take the apparently retrograde step of switching back to the Series 3 after sampling the delights of the '5' and its touch screen? Actually many reasons spring to mind: a clearer screen, simpler (more reliable) hardware design, longer battery life, cheap replacement units, a more sophisticated AGENDA and over 2000 third party programs. Most of all, the super-fast 3mx has been reported to show even the Series 5 a clean pair of heels for such day-to-day tasks as opening databases and spreadsheets. Truly, there's never been a better time to own a Series 3.

In this article, I'm going to look in detail at how to physically get your files back into Series 3 form and what information you might lose in the process. The graphical richness of the Series 5's applications do tend to cause a few

headaches when converting back, but with a little care and attention most things can be salvaged.

DATA

Most vital to you will probably be your databases of contacts and items. Luckily, these are usually just plain text, neatly separated into discrete fields, making conversion quite easy. One slight 'gotcha' is if you've entered carriage returns (i.e. pressed [Enter]) within any field in any record. These are usually either lost during the conversion (being converted into 'unknown' characters on the PC or Series 3) or left orphaned (together with the rest of the record's contents). After checking that you haven't used carriage returns inside your Series 5 DATA files, it's a good idea to also remove any [Tab] characters. Any embedded objects (such as SKETCH pictures, sound clips, etc.) will of course be lost, but you can copy them to standalone files and then convert them separately if you need to.

There are several common ways to carry out the conversion to Series 3 format. Easiest is probably to use 'Export as text file' on DATA's



'File...More' menu card. Tap on 'Options' and select 'None', 'Tab' and 'End of line'. Give the export file a name like 'Address.tab' so that you'll recognise it later and then copy it (via a PC or Mac) to the Series 3, importing into DATA with the 'Merge in' command, etc. A second method involves the popular freeware conversion tool from Palmtop BV, 3Base. Available on all the Palmtop CDs, 3Base converts to and from most plain text and Series 3/PC database formats. For example, you can use PsiWin to convert your Series 5 DATA file to a dBase III database on your PC, use 3Base to convert this to Series 3 form and then copy the result onto your Series 3 for final tidying up.

AGENDA

Of second-most importance is probably your main AGENDA file. Although there's no offi-

cial way to convert this type of information, two partial solutions are available. A freeware utility exists for the Series 5 called 'To3', whose purpose is to copy dated and undated events into a Series 3 AGENDA template file. Although it generally works well, repeat information (anniversaries, etc.) and to-do entries are unfortunately not supported at the time of going to press. Contact the author at www.btinternet.com/~colin.shearing to download the very latest version.

The other solution is to set up a suitable Personal Information Manager (PIM, e.g. Microsoft Outlook) on the PC and then synchronise the Series 5's AGENDA to it. By using the shareware PsiSync (available only from www.kerswell.demon.co.uk) or a similar utility it may then be possible to synchronise the Outlook file to the Series 3. The process is not trivial and is well beyond the scope of this

article, but see “THREE for all on page 75 for some additional guidelines.

SHEET

Spreadsheets are very well catered for with PsiWin. A conversion to Series 3 SHEET is built-in and works very well. Basic formatting (Bold/Italics, etc.) is preserved, as are formulae, and all you'll lose are Series 5-specific cell formatting features such as shading, borders and so on. Moving a SHEET onto the Series 3 is usually as quick as setting up a few column widths again.

WORD

The word processor is probably the application where you've been the most tempted to insert objects. Sketches, spreadsheets and sound files are all par for the course, but will be lost in the conversion to the Series 3 using PsiWin 2.2. The core text will be preserved, though, along with basic formatting and paragraph styles. As with DATA before, if you need to preserve the content of an object, copy it into a blank file of the right type and then convert that separately.

SKETCH

I doubt that there are many Series 5 masterpieces which you simply must have on the



Series 3, but if necessary PsiWin will convert these to Windows BMP images. Any decent PC painting tool (e.g. PaintShop Pro) will be able to crop and convert these to 16-colour 480x160 pixel PCX files (another standard format). The DOS tool WSPCX will then let you convert to Series 3 PIC format, as used in programs like Draw. Because the PIC format is limited to just black, white and grey (i.e. one less colour than Series 5 SKETCH), your pictures may be somewhat less than perfect after having been through so tortuous a process.

RECORD

As with your artwork above, it's unlikely you'll need to convert many sound files back to the 3, but a similar 2-stage process will do the job if necessary. PsiWin 2.2 will convert a Series 5 RECORD file to a Windows WAV file. The freeware DOS tool WAV2WVE will then do the rest, though note there are two versions of this utility, each geared to handling WAV files of different sample rates, so a spot of trial and error may be in order.

Third-party applications

Many of the most popular Series 5 programs originated on the Series 3 and you can usually go back to the older versions, retaining your existing registration codes. Even programs that started in Series 5 form will usually have a 16-bit equivalent. The biggest losses will be commercial reference software that's only possible on the '5' because of the relatively low price of CompactFlash memory, e.g. Street Planner, Route Planner, Collins Dictionaries and so on.

Go for it!

Although there are a few small hurdles to overcome in the conversion down from '5' to '3', most are surmountable. If you know what you're doing, the bit-by-bit conversion of your personal information files shouldn't take more than an hour or so. The Series 5 has many fans, to be sure, but many others prefer working the slimmed-down SIBO way.



THREE for all

Pete Sipple and Steve Clack
*examine some highlights from
the Series 3 world*



Faster than a speeding bullet

Having now been running a Series 3mx for more than four months, I have to report that it's a very satisfying machine to use. Anyone used to a 3a or 3c can't help but smile to themselves as the applications open and perform at lightning-fast speed. And I even like the colour...

Virtually the only criticisms levelled in our review in issue 20 were relating to the lack of bundled connectivity software (PsiWin and Psimail Internet) and the price, which we felt was a tad high. Only two months after its September launch, Psion have dropped the price by a full £40, to a very reasonable £229.95 including VAT. That still comes to almost £340 if you add PsiWin and Internet access, which in many ways compares unfavourably against the Series 5's UK RRP of £400 (which includes PsiWin, free Internet software plus full fax support). It's a racing certainty that we'll see the 3mx bundled with all these things for an all-in price of £199.95 before the end of its lifetime, but that may be many months away yet.

U.S. disappointment

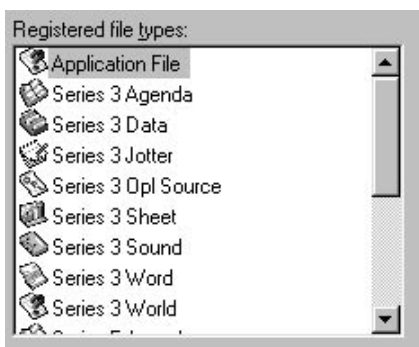
We've had a number of readers from the USA asking "Why isn't the mx available on this side of the Atlantic?" It would appear to be Psion's

marketing strategy not to confuse the already burgeoning US handheld market with what is essentially a re-vamp of a seven-year-old machine. This may confuse the American palmtop-buying public into thinking of Psion as a less than innovative company when compared with the plethora of new machines available from other manufacturers. It's a real pity that this strategy is leaving a number of Series 3 upgraders out in the cold, with no option at present other than to buy an imported machine (complete with non-US spelling checker) from Europe.

SC

Talking to Big Brother

The recent release of PsiWin 2.2, as reviewed in the last issue, has proven to be a boon for many Series 3 users. Psion users are a loyal bunch, which means that many of us have more than one palmtop in the house: either as a spare, on loan to a friend or, more commonly, in use by someone else in the family. This typically happens when the main Psion user decides to upgrade to a Series 5, which in turn makes data exchange between machines an issue. There are also those who have made a conscious decision to move from a Series 5 back to a Series 3 machine, as discussed in Steve Litchfield's 'The 3-plan diet' article on page 71.

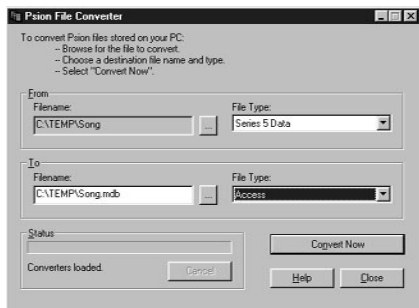


PsiWin 2.2's conversion formats

With PsiWin 2.2, a certain amount of Series 5 to Series 3 backward compatibility has been introduced and general techniques for conversion are discussed within the article on page 71. When trying to convert files that PsiWin can't cope with, here are a couple of conversion techniques I've personally found particularly effective:

Converting for DATA

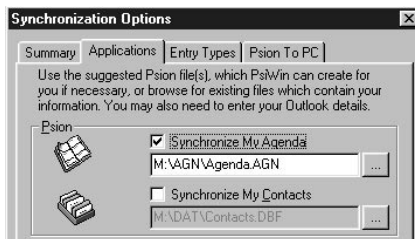
Although I use a Series 5 much of the time, I have some technical data which I would prefer to use on my 3c. In my work I often need to access my data in a low light environment, while working on floodwiring jackfields, where my 3c's size and screen are much more suited to the task. By backing up my Series 5 DATA



Converting DATA to Series 3 format via MS Access

file onto a PC, I'm able to use Psion's converters to save my data to another format, one which can be read by both the 5 and 3c. I tend to use the 'Access' convertor, but have also found the 'dBase 5' convertor to work well. Experimentation is the key, but here's what I do:

- ▶ On the PC, open 'My Psion' and select 'Psion|Convert files' from the menu.
- ▶ Select the Series 5 DATA file and convert it to Microsoft Access format.
- ▶ Connect up the Series 3a/3c/3mx.
- ▶ Drag and drop the converted Access file onto your Series 3.
- ▶ Choose an 'Access to Series 3' conversion.



Converting AGENDA to Series 3 format via MS Outlook

Converting for AGENDA

This is much trickier, but I had considerable success using Microsoft Outlook as the 'gateway' on my PC. Once it's been set up, it's a lot easier the second time around, as the synchronisation settings are remembered. Here's the trick:

- ▶ Connect the Series 5 to a PC and run PsiWin's Synchroniser.
- ▶ Set up an AGENDA-only synchronisation into Outlook and select 'Synchronise now'.
- ▶ After completion, connect the Series 3

and set up a new, similar synchronisation.

- Running this new synchronisation effectively copies the Series 5 AGENDA entries onto the Series 3.

Obviously, this method only works for those users who have access to a PC loaded with a PIM such as Microsoft Outlook 98 or Lotus Organiser.

PS

The Macintosh PDA of choice

As PC users get even better Psion connectivity with PsiWin 2.2, Apple users may feel aggrieved that Mac connectivity is not up to the same standard. Despite the recent turnaround in Apple's fortunes, PC-owning Psion users still outnumber Mac users by at least 10 to 1, maybe 20. The pure economics of this dictate that the bulk of software developer effort will always be expended on PC connectivity solutions.

Despite the lag between the Psion-friendliness of the two desktop formats, the Series 3 range has now emerged as one of the two PDAs of choice for Mac users. Beyond the world of Psion, and since the untimely demise of the Apple Newton, the 3Com PalmPilot gets the award for the most Mac-friendly palmtop device. Beyond that, the entire Windows CE range offers no Mac connection options whatsoever, making them useless for anything other than stand-alone operation.

With Series 5 Mac compatibility limited to backup, restore, software installation and file

transfer via raw text and CSV files with the lacklustre MacConnect, PsiMac for the Series 3 range begins to look decidedly powerful. Its only major benefits over MacConnect are the addition of WORD and SHEET conversion filters, but these account for at least 70 percent of what the majority of users need. Running PsiWin under SoftWindows or VirtualPC is an option, particularly with the extra horsepower of the latest G3 machines, but PsiMac is a much tidier solution.

Fairly straightforward database transfers are also possible by converting your Series 3 DATA files via CSV or TSV format to Filemaker Pro, ClarisWorks or other Mac format databases. This really leaves AGENDA transfer and synchronisation as the major remaining bugbear. Always the biggest compatibility headache even with 'properly supported' PCs, the harsh truth is that Mac users should forget all ideas of running their diary on both machines unless resorting to the PC-emulation route. If you need to share your Psion-based diary with others you can do no more than print out a copy of your Series 3 AGENDA, or use the 'Print to file' option and give them a text file containing your entries.

SC



Series 3 to Macintosh

Series 3 to Macintosh connectivity was covered in more detail in 'The Mac connection' in issue 10, and the PsiMac review in issue 13.

WIN a FREE 4MB flash SSD or 32MB CompactFlash!!



Whether you're a Series 3a/3c/3mx or Series 5 user, you can expand the capacity of your Psion computer by winning either a Psion 4MB flash SSD or a Simple Technology 32MB CompactFlash—you choose which prize you want.

Just answer the three questions (below), and send your answers on a postcard to Palmtop Publications, PO Box 188, Bicester, Oxfordshire OX6 0GP, ENGLAND.

We can only accept entries by postcard, and all postcards must be clearly labelled COMPETITION 21. Any entries received by means other than postcard will be discarded.

All entries must reach us by 25th January 1999, and the winner will be notified on the following day.

Question 1: How many parameters does the SHEET function 'IF' take?

Question 2: How many partners does PSION have in Symbian?

Question 3: What does 'ESD' stand for?

Last issue's winner: Mr Len Lewis, Llandudno, Gwynedd

Synch or Swim?



***Synchronising your Psion
AGENDA with the latest PC-
bound Personal Information
Manager can be a tricky
business—but why bother?***

by Roger Pemburton

Why, oh why do they bother? Even a cursory inspection of the Internet newsgroups reveals a host of people all trying to 'synchronise' their Psion with Personal Information Manager (PIM) software on a PC. A typical question might run something like this: "I've been trying to synchronise my AGENDA with ClumsySuite 2000 for the last couple of weeks, but keep running into problems." Followed of course by a description of all the different woes the unfortunate person has suffered during the saga.

This is no isolated instance, it seems that a vast number of Psion users have been hoodwinked into believing that if they don't synchronise their palmtop's data with a PC then they're not using it properly.

Please don't misunderstand me, in a few specific cases there are genuine reasons for keeping an office-bound PC synchronised with a Psion. Most people don't fall into these exceptions though, and spend much of their lives trying

vainly to achieve something they don't need in the first place.

Keep it with you

For a start, a Psion (by definition) is a device you're always going to keep with you. Whether on your belt or in your briefcase, it's ready and willing to record meeting notes, telephone numbers, look up contacts, etc. It doesn't matter where you are when the need for information arises, because it's there by your side. Compare that to your desktop PC. It sits in your office hour after hour, often lonely and unattended. You can't take it with you into meetings, you can't tuck it under your arm at the end of the day to enjoy its company at home as well, and you certainly can't use it sitting in a restaurant or on the toilet. That being the case, what on earth is the point of putting essential diary and contact information on it? And you certainly don't want to have to synchronise two computers every time you leave your desk. A Psion is excellent as a PIM. The PC makes a terrible one but excels at

really power-hungry applications. The obvious answer is just to use them both for what they're best at.

Two things at once

Consider the advantages of using the Psion as your PIM and the desktop machine as your main workhorse. If you need to quickly make a diary entry or look up a phone number there's no need to suffer hourglass waits and hard disk chatter. You simply do it, quickly and simply, on your Psion. You'll be more productive too, as the 'dead' time on the desktop machine spent waiting for Internet connections or office applications to launch can be spent perusing your AGENDA for the current day or reviewing your To Do lists. With a Psion and a desktop computer you can really multi-task!

Faster by Psion

The usual argument for needing to synchronise the two machines runs something along one of two lines: "I find it easier to type in information on the larger screen and keyboard" or "My secretary needs to see what I'm up to". Although both are valid points, neither persuade me that synchronisation is the answer. Easier to type? Yes, of course, it's easier, probably by at least 10 words a minute. But how much typing do you do into a PIM package per day? If you're a typical user then probably not more than 500 characters—the equivalent of three minutes solid typing. Let's say it takes an extra minute a day at most to do the necessary data entry on the Psion. That's about four hours extra over the whole of the typical working year. Now, synchronising the Psion to the desktop takes, on average, at least a minute each time to achieve (and many people say five minutes is more accurate). Add to that the time taken for installation, updates and troubleshooting and you end up with a 'real' figure of about seven hours per year, minimum. It seems to me that synchronising your Psion

to the desktop has just decreased your productivity, not increased it.

The second argument is also worth looking at in detail. How much of your AGENDA do your colleagues or secretary really need to see? Probably not more than a few meeting times per day, so why not just take a minute before you leave the office to make sure that the desktop PIM's diary has the relevant details? If your office needs access to your contact list, why not just use PsiWin to convert your databases across once a week?

If you can stand up and say, despite my reasoning above, that you need synchronisation in order for your office to function, then go right ahead—you obviously fit my 'exception' category. But I maintain that the vast majority of us simply don't need to complicate our lives with the vagaries of trying to keep two computers from different manufacturers (and running different operating systems) in close touch with each other.

The PsiWin link does an excellent job of making sure your precious Psion is backed up and is fairly good at converting documents entered on-the-move into something which can be embellished on the desktop. But don't try and tell me that a Psion Series 3 or Series 5 is useless as a PIM because you can't reliably synchronise it to LotsAData '99 or BoutToCrash (Millennium edition).

As with most things in life, Personal Information Management is about using the right tool for the right job. I venture that the humble and very personal Psion is the best tool for organising your life, not a crash-prone, power-hungry, immobile and expensive desktop computer.

Needle in a Haystack

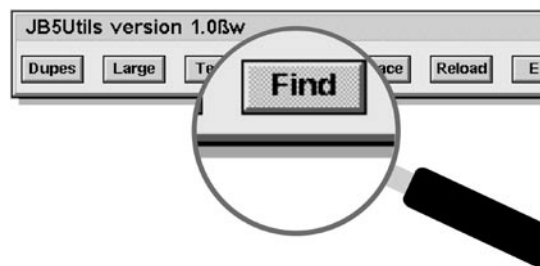
Searching your Psion for that misplaced file or text string needn't be hard work...

- Steve Litchfield investigates

Hopefully you'll never need to read this article. With a well organised folder structure, you'll instantly know where any particular Series 5 document file is located on your palmtop. And after all, it surely can't be that hard to find a file on a pocket computer that's only six inches long?

The sad reality is that, with the best intentions in the world, even the most fastidious Psion user loses a file every now and then. That letter you wrote two months ago—has it really been deleted, or is there a copy lying around somewhere? And the costing figures you drafted in a hurry for your boss—you can remember putting the words "Draft Estimate" somewhere in the top of the SHEET document but you've no idea what you called the file.

With CompactFlash cards of 32MB and more now commonplace, it's not surprising that individual files can sometimes be misplaced. Don't worry too much though, as there's a host of utilities which claim to be able to locate long-lost files by either name or contents. All



you have to do is fill in the bits you do remember and let the software do the rest.

Testing, testing

The two most important facts about each search tool are how quickly it finds your information and, once found, how much help it gives you to access it.

My test-bed machine is an 8MB Series 5 that's fairly bulging at the seams, with a full 32Mb CF disk containing over 50 applications and only 2MB free on the internal disk. A grand total of 1,580 files spread over 180 folders, and a worthy test for the plucky contenders mentioned below.

The two speed tests I performed were:

1. Looking for any file with a specific text string in its name.
2. Looking for any file containing a specific text string anywhere within its body.

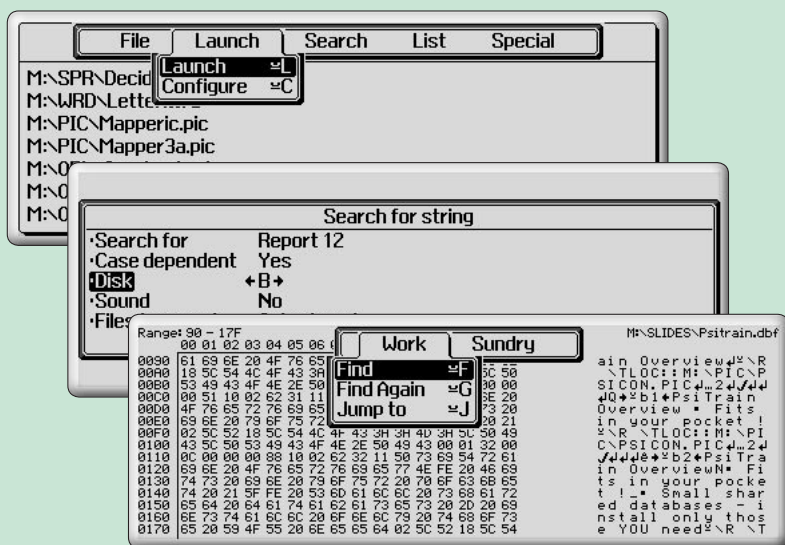
Finding with a Series 3

Finding files on the Series 3 range is usually much less of a problem, partly because of the smaller memory/disk sizes and partly because most users tend to keep files organised by type in their original system screen lists.

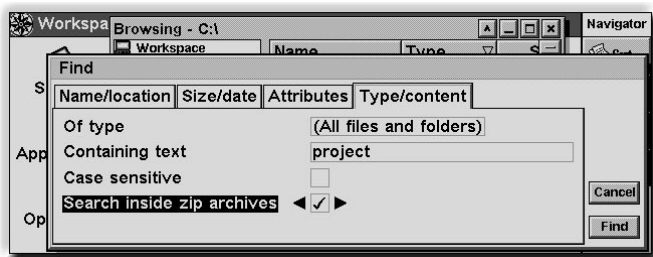
The odd file may still get 'misplaced' though, so checking out suitable utilities is still a very good idea. Luckily, there's just the one contender: *JBFind*, from John Boyce, does every search operation a Psion 3 owner could ever want and is free. As with the other programs on test here, *JBFind* will either search for fragments of a file name or for occurrences of a text string within files in a directory tree. Once found, files can be launched in their correct applications or browsed in the handy hexadecimal viewer. Lists of found files can be further narrowed with another search or sorted and exported for later reuse.

Searching 1.5MB of files for a file name took just eight seconds on a 3c and searching for a text fragment within the same files took just under a minute

Other useful tools are *JBDupes* (which tracks down files of the same name—possible space-wasting duplicates) and *Memofind* (which locates specific text strings within AGENDA documents). All three programs can be found on all *Palmtop* CDs, in the \library\util folder.



Navigator even searches inside ZIP archives!



Navigator

The most expensive of the programs on test, Purple Software's Navigator (fully reviewed in issue 18) is, of course, an awful lot more than just a search utility. Searching is, however, one of its boasts and I was keen to see how it stacked up.

As you might expect, Purple's coding is up to its usual slick standards, with the authors obviously having a clear understanding of the inside workings of EPOC. Although Navigator as a whole is held up by the speed of the operating system itself (especially with a large CF disk installed), its 'Find' function whipped through my disks like a dose of salts. The ability to carry out advanced searching, using size, date, type, etc. as the criteria is also most welcome, especially as a way of restricting the search parameters and thus speeding things up still further.

JB5Utils

At the opposite end of the price spectrum, the freeware JB5Utils also boasts more than one function, with a range of unique features. These include listing the largest files and folders on your disks in size order, tracking down duplicates and auto-compressing any databases it finds. The program's file searching speeds left a lot to be desired (written in OPL, it was never going to be in the same league as Navigator) but, once found, the list of matches can be saved and reloaded later or used as a source for a further search. A favourite feature of mine, individual files can be also be displayed in a handy hexadecimal viewer.

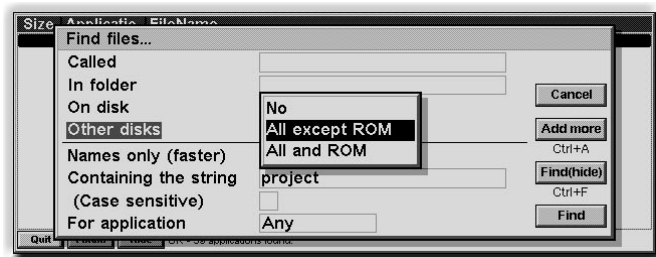
Global Find

Staying with freeware, Global Find turned in some quite acceptable file searching times (though still a full three times slower than Navigator). It was, however, let down somewhat by its rather spartan feature set and slightly confusing interface, including the tiniest



Finding is just one of JB5Utils' principal functions

Global Find
—free and
functional



control buttons you've ever seen. With no registration fee to worry about, it's worth keeping tucked away on your 5 for emergencies.

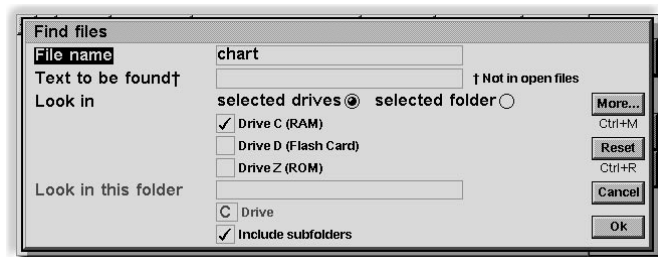
Ferret

Ferret has just about the perfect interface for a standalone search utility. The fill-in dialog is intuitively laid out and the toolbar is delightfully simple. It's almost worth overlooking the unremarkable searching speed just to be able to make Ferret your preferred tool. However the authors, Nutshell, have just announced

that they are pulling out of the Psion software scene and will no longer be able to support the program or fix any bugs. The latter is important as Ferret crashed horribly when asked to do a search for a text string within my 32MB CompactFlash disk.

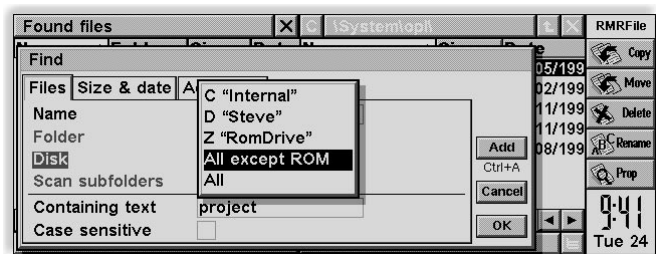
RMRFile

Although not marketed as a Navigator clone, much of RMRFile's functionality is similar to its Purple Software competitor. The author also obviously uses similar low-level operating system functions to do file finding, as the



Ferret's dialogs
are well thought
out and its best
feature

Navigator-
wannabe
RMRFile—
comprehensive
search options



	Filename search across all disks (secs)	File contents search on internal disk (secs)	Advanced features	Actions possible on found items	Price	Quality	Value	Version reviewed
Navigator	16	23	Searching by size, date, type and attributes. Searching within ZIP files. Complete file management interface and system screen replacement	Opening and all other Navigator functions. No hex editor for 'unknown' file types	£30			1.00F
JB5Utils	150	510	Compression of DATA files encountered. Additional functions to find duplicate, large or temporary files	Deletion, search narrowing, plus hexadecimal viewing	FREE			1.0flw
Global Find	56	73	Search restriction by file type, automatic background search mode	Opening only	FREE			1.1
Ferret	48	Crashed!	Exclusion of system folder, viewing of found AGENDA entries. Searching using size, date and type criteria	Opening and deletion	Currently unsupported (was £10)			1.1
RMRFile	17	28	Complete file manager. Searching using size, date, attribute and type criteria	Opening and usual file management functions	£15			1.00F

search times were almost identically quick. Once found, items are similarly presented in a new browser window and treated in the same way as you would items in a normal folder.

Picking a winner

Choosing this sort of tool is always going to be a very personal thing. Because of their price (free) and tiny size, I'd recommend loading JB5Utils and Global Find onto your Series 5 even if you think you'll only need them once a month. 'Power' users needing to search their Series 5 once a day or more should install (and pay for) either Navigator or RMRFile. Both offer blistering search speeds, flexible handling of the search results and a multitude of file and disk management features besides. Both can also now be tried for 30 days without cost, by downloading from the Purple and RMR web sites, so making that personal choice has never been easier.

Software availability

Navigator - from all major Psion dealers, or contact Purple Software directly on 0171 3877777. A downloadable evaluation copy of the program is available from www.purplesoft.com.

JB5Utils - CD04 onwards, in \library\s5util

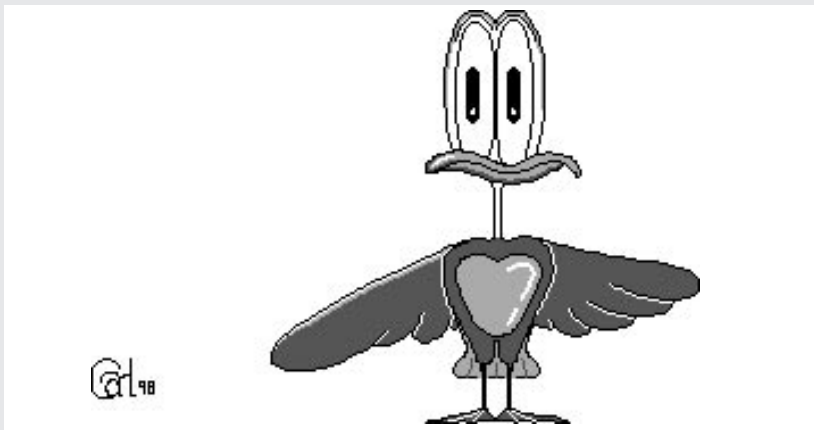
Global Find - CD02 onwards, in \library\s5util

Ferret - CD05 onwards, in \library\s5util

RMRFile - CD05 onwards, in \library\s5util

Psion ART

Original artwork created by Carl Reader using Series 5 SKETCH



Save the Fox!



That's not the slogan of a wildlife movement, but one that is starting to become more familiar to EPOC users since November 3rd. When I arrived home that Tuesday evening and downloaded my email, there was a stark message waiting for me. "Geofox have ceased trading and will be going into voluntary liquidation" was the gist of it. The machines were creating a lot of interest, getting good reviews, and attracting corporate users as well as private ones. We now know that plans had also been made for a Geofox Two machine. Sadly there were problems with cash flow, and after repeatedly trying and failing to refinance the business, Geofox had no option but to close. Like many users, my first thought was for the people I knew there. In my contacts with them they were always helpful, friendly and efficient, replying promptly and positively to queries, and impressing many people with their approach to customer care. As someone fortunate enough to have both a Series 5 and a Geofox One, I soon came to appreciate their product as an alternative EPOC machine with its own pros and cons.

My next thought was to contact Elisabeth Liddell, with whom I had been discussing Geofox matters since the appearance of her FoxPop web site at www.foxpop.ndirect.co.uk (see the Newsreel section of issue 20). That site has now become the focus of information, mutual support and general chat related to the collapse of Geofox. Several others have joined her to form the FoxPop 'Editorial Board'—an informal collaboration of users determined to help support others. There's little anyone can do individually, but together FoxPop is providing a focus for Geofox One users, trying to help them with specific problems.

So far around 100 users have made contact, and through one of them (John Arnold of Business Credit Management UK) FoxPop gained representation at the creditors' meeting that was held in Cambridge on November 27th. At that meeting it transpired that just over a thousand machines were sold (compared to the target of 10,000) and that the remaining stock (potentially machines, peripherals and spare parts previously valued at £300,000) is now worth around £10,500. Depending on the composition of that stock, it could be enough to provide spare parts to keep every Geofox One machine running for as long as their owners want to use them.

Existing owners have several possible concerns that were previously dealt with by Geofox:

Software difficulties should be reasonably straightforward to deal with, as the vast majority of EPOC applications work on the Geofox, either full-screen or in 'letterbox' mode with the bottom portion of the screen being blank. Some applications do odd things when the pointer is moved over buttons, and a tiny few crash impressively, but those are very few and far between.

The major software-related concern is whether future versions of the Message Suite will work on the Geofox. Given that Geofox were a Symbian licensee, there is a chance that Symbian may be willing to issue patches to make future versions compatible with the Geofox One, but there is currently no way for them to be paid for that.

A bigger problem is what happens when anyone has a hardware problem. Personally I use both the Geofox One, with which I have had one

such problem (a serial port failure), and a Series 5 that has had five (affecting the hinges, serial port, and peeling and cracking cases). This small sample suggests that reliability is better with the Geofox than with its Psion sibling, but even so the day will come when something major fails. At the time of writing there is absolutely no way of recovering from this, short of buying a new machine (if you can find one) or trying to get it replaced by the supplier. However, as Geofox supplied the bulk of the machines themselves, those aren't options for most users. The obvious alternative route is to pay Pinnock Organiser Services (see article in issue 19) to repair their machine. Although POS are interested in providing such a service, the Geofox One uses many totally different components to the Series 5, so there's little they can do without a suitable supply of spare parts.

Of course, the ideal solution would be for a 'White Knight' to appear, buy Geofox, resume production and support existing users. That now seems very unlikely, and owners must look for help from other sources.

It isn't all gloomy though; there are several items of good news. For example, some software authors have announced they are intending to continue producing 'Fox-Friendly' versions of their applications. Prominent among them is RMR Software, who have already taken great care to ensure that their products work on both EPOC machines. XTM's DOS emulator was originally produced for the larger screen of the Geofox One, and the Project Magic team porting the Opera Web browser to EPOC are also committed to ensuring the Geofox One benefits from their product.

FoxPop will endeavour to help authors without access to a Geofox by testing new applications for them. Conversely, authors with experience of how Series 5 applications can misbehave on the 'Fox (and knowledge of how to fix those

problems) are asked to contact FoxPop if they are willing to act as consultants to others.

The web site is also hosting some of the software downloads, hints and tips, and other resources that were carried on the Geofox web site, or provided on request to owners. See the FoxPop ad on page ?? for more details of this, the electronic bulletin board, and the other services available there.

How can you help?

To summarise, please contact Elisabeth Liddell if:

1. You own a Geofox One machine and need or can offer help with particular problems.
2. You are a developer wanting help in testing your application on a Geofox One, or can offer help to others in this area.
3. You are interested in joining a consortium trying to buy the remaining Geofox stock for the benefit of all users.

Finally, do please remember that all those involved with FoxPop have other responsibilities (jobs, family commitments, etc.), and that none of them is looking to make money at this. If you don't get the same level and speed of service that Geofox provided, please be patient and remember that everyone is just a user trying to help others!

You can read John Arnold's report of the creditors' meeting on his web site at:

www.creditman.co.uk

Elisabeth Liddell can be contacted by email at elisabeth@foxpop.ndirect.co.uk, or by post at 22 Kirkton of Auchterless, Turriff, Aberdeenshire AB53 8BG.

Tech-Topics

Following the release of Purple Software's PowerBase relational database product, Leigh Edwards looks at relational versus flat-file databases

The release of PowerBase from Purple Software, reviewed on page 26, represents a significant milestone in database technology on the Psion Series 5. So I thought I'd take the opportunity to explain the differences between flat-file databases and relational type systems, and to illustrate some of the features offered by PowerBase in a little more depth.

Fad and fashion

Database Management Systems (DBMS) have become essential features in computer systems of all shapes and sizes. Over the years they have come in many guises. Fashion has often dictated that the word 'relational' be included somewhere in the description of any modern DBMS, even when it is simply not justified. Database systems used to be described using terms such as flat-file, network, hierarchical, indexed sequential, etc. Things are moving on yet again, and the seriously fashion conscious amongst the DBMS development community are now desperately trying to force the words 'Object Oriented' into the descriptions of their latest DBMS offerings—but I'll leave the topic of OODBMS for another day.

The fundamental aim of most DBMSs is to contain, manage and retrieve real world information in file structures that maintain the 'links'

between pieces of data that 'belong' together. Some very complex and clever approaches have been tried, but all systems have benefits and costs. Flat file systems such as the Series 3 and Series 5 DATA applications are simple to use, but really show their limitations when used with certain types of data. Imagine setting up a meetings logging system where you wish to maintain details of your business contacts and record the details of each meeting or conversation. Using a flat file database system would involve much repetition of the contact details in with each meeting data record, when in fact all that is required is to keep one detailed database entry for each contact and link it to every instance of a meeting or conversation with them.

Relational?

So just what is a Relational Database Management System (RDBMS)? It certainly has nothing to do with keeping tabs on your relations. Some very technical and strict rules were defined a number of years ago by two IBM researchers: E.F.Codd and C.J. Date. Fortunately the results of their highly academic work can be described in more straightforward terms, and in fact most DBMSs that claim to be relational don't follow these rules to the letter, mainly due to numerous practical considerations.

One key principle is that of splitting data out into separate tables containing rows of information, each of which corresponds to one database record. The columns in a table correspond to the data fields in each record and typically the data items in each row are uniquely identified by a single key field. Splitting the data out into separate tables is done so that each row is unique—a row of data should never repeat. Data from different tables can be linked by creating a relationship between them (usually using a common field). Thus in the hypothetical meetings logging system above, the details of each contact would be held in a single row in one table, a second table would hold the records of each meeting or telephone call, and the two tables could be related over a common field such as a unique contact number. Each time a meeting record is displayed the system can look up the matching contact details from the related table, thus avoiding the data entry and storage overheads involved in saving the contact information numerous times, once in every meeting record.

A short example

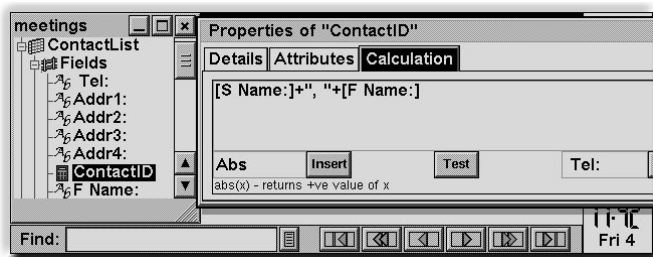
So how can PowerBase be used to create a meetings database as outlined above?

The first task is to import your name and address DATA file into PowerBase to serve as the basis of the ‘Contacts’ table. Use the ‘File|More|Import new table’ menu option and pick your address DATA file (it will need to be closed first if the DATA application is currently using it), and give the new table a name such as ‘ContactList’.

We now need a unique field to use as the basis of the link between the ‘ContactList’ table and a new ‘Meetings’ table we will create later. In my personal address file I have two fields: one called ‘Surname’ and a second called ‘First name’. In my case, by combining these two fields into a new ‘Calculated’ field, I can be sure that each record in the ‘ContactList’ table will have a unique identifier or ‘Key field’. Create the new calculated field by expanding the ‘Schema view’, select the ‘fields’ branch for the ‘ContactList’ table then use the ‘File|Create new|Field’ menu command.

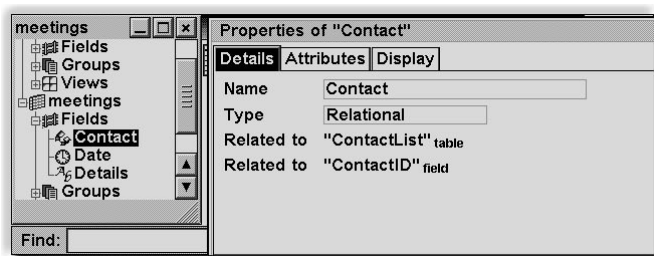
Give the field a name such as ‘ContactID’, set the field type to be ‘Calculated’ and the calculation to be [Surname]+”,”+[First name] which will add (concatenate) the two fields together to give a new field containing results such as ‘Smith, John’.

Field name	Field type	Attribute/size
Contact	Relational	Related to “ContactList” table Related to “ContactList” field Display set to [ContactID]
Date	Date	
Details	Text	64



Setting up the 'calculation' for the new field

Defining the field that determines the relationship between the two tables



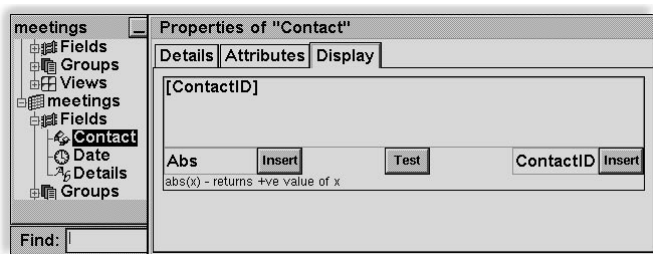
Next, we need to create a 'Meetings' table to hold the details (such as date, time and purpose) for each meeting between you any particular contact. New Tables are created via the 'File|Create new|Table' menu option. I suggest you create a table with fields as shown in the illustration at the bottom of the previous page.

The relationship between the 'Meetings' table and the 'ContactList' table is created as above and will allow PowerBase to 'look up' the details of the contact when the records held in the 'Meetings' table are viewed.

Whenever a new entry is made in the 'Meetings' table, pressing the tab key twice will bring up a list of the 'ContactID' entries, although confusingly, the results of your selection from the list will not be seen until the record is stored by pressing the 'Save' button.

In summary

Relational database systems can have many benefits, but as with many things in life they are not totally free from disadvantages. You have to put considerable effort into careful data analysis and database design. Removing



Setting the information to be displayed by the relationship between the two tables

repeating data (called Normalising the data) is not an intuitive process and takes practice. You often have to 'invent' additional key fields to act as unique identifiers. Maintaining 'Referential Integrity' can be problematic in some systems, e.g. deleting one row by accident from the 'ContactList' table above could possibly leave a lot of orphaned rows in the 'Meetings' table, i.e. meeting records with no corresponding ContactID. Fortunately, PowerBase detects and prevents this in the example described above.

On balance though, relational systems have plenty to offer: Object Oriented Database Systems may be the very latest vogue, but they are not suited to solving most real world problems yet. Hopefully in this all too brief overview I've illustrated one or two of the potential benefits of relational systems over the much simpler 'flat file' databases.

So you want to learn to program?

Due to enormous demand, from the next issue onwards Leigh will begin a major new Tech-Topics series on OPL programming for beginners.

If you have ever thought of taking the plunge into OPL then don't miss the next Tech-Topics...



Working with DATA



The third and final part of our tutorial aimed at the relative beginner to the Series 5's built-in program

by Geoff Preston

Merging DATA files

Before attempting to merge two databases (join them to make one single file), you must first recognise some limitations:

- 1) If you wish to merge all the data from one file into another, the labels for all fields must be the same (including their spelling, but not necessarily their order) for both databases.
- 2) Any parameters associated with the labels (such as length, for text fields) must also be the same. Fields with different parameters will be omitted.
- 3) Labels in the database you are attempting to merge from which do not exist in the file you are attempting to merge into, will be omitted. This feature can, however, be used to your advantage, by temporarily renaming labels to prevent certain data from being merged.
- 4) All records will be merged, including any duplicates.

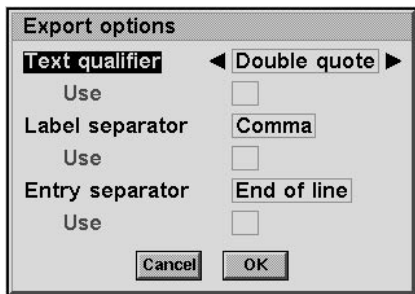
Once you've established that the two files are as you want them, I strongly recommend

making copies of both files before attempting the merge. Once safely backed up (using 'File | More | Save as...'), open the file you wish to merge into and use 'File | More | Merge in...'. This will open a dialog and let you choose the file you wish to merge from. Tap the 'OK' button to do the merge.

If you had previously set DATA to sort entries, the new records will be mixed in with the existing ones as they are merged. It may, however, be easier for checking purposes if sorting is temporarily switched off during merging (use 'Tools | Sort by label...' and set 'Labels to sort by' to zero). The incoming records will then be added to the end of the current database, making it easier to check that everything worked correctly. Once you've done this, a typical next step would be to turn sorting back on and check for duplicates, etc.

Exporting a text file

This feature is particularly useful for exporting data in a format which can be used by other database programs, usually on different computers. It can also be useful when importing data into SHEET.



The default settings for text export

Use 'File | More | Export as text file...' to open a dialog into which you'll eventually enter a filename and a location for the saved text file. Before doing that however, tap the 'Options' button and a second dialog will open in which you must specify three things:

- 1) **Text qualifier** - this simply specifies a character to go at the beginning and end of each piece of text exported from each field. It defaults to a double quote (") and unless you're doing something very specific and know what you're doing, this is best left as-is. One situation in which you might have no qualifier would be when dealing exclusively with numeric data to be copied into SHEET.
- 2) **Label separator** - this is a character used to separate the contents of each field. The default is a comma and is the most common separator used, along with the slightly more exotic 'Tab'.

One possible conflict is that if you elect to have no text qualifier, leave the label separator as a comma and some of your data fields contain text which in itself contains commas, there will be confusion over whether a comma is a separator or part of the text. This will almost certainly lead to an error when the data is imported into another program.

- 3) **Entry separator** - this determines the mark used at the end of each record. In all my years of computing, I've never seen nor heard of any entry separator other than a 'carriage return', or 'End of line' as it is called in this dialog.

When the three main options have been set, tap the 'OK' button or press [Enter] to return to the file dialog. When choosing a name, it may be worth including a three letter 'DOS suffix' (the bit after the full stop in a file name) if you're intending to export the file to a PC. The two most common formats and names used are:

- " for Text Qualifier, comma for Label separator and End of line for Entry separator. This type of file is usually known as a CSV or **Comma Separated Value** file.
- Nothing for Text Qualifier, [Tab] for Label separator and End of line for Entry separator. This type of file is usually known as a TSV or **Tab Separated Value** file.

When you're ready to save the file, tap 'OK' or press [Enter].

You can check the contents of the exported text file by loading it into WORD—create a new WORD document and use 'File | More | Import text file...'

Importing a file

Here you're importing data that's been exported from another database, probably on a desktop computer. If you're not sure of the file's format, begin by importing the text file into WORD, as described in the previous paragraph. You will be able to see the file in its 'raw' form (with commas, quotes, etc.) and this will help you to give DATA the information it needs later on.

You should create a new file in DATA with the same number of fields and in the same order as the data you're trying to import. The field types must also be compatible with the information in the file being imported. The easiest option is to set them all to 'Text' (which will accept anything) but that will not necessarily be the best option for numeric data (sorting numbers as plain text can produce some strange results).

You should also ensure that the parameters associated with the field labels meet the requirements of the data you're trying to move. For example, if a field in the text file you're trying to import contains 80 characters, ensure the corresponding field in the file created in DATA will support that number of characters. Similarly the number 101 will not import into a numeric field whose range is specified as 0 -100. It is important that you get it right now, because once a field has some data in it you will not be allowed to change its type.

Next, use 'File | More | Import text file...' and tap the 'Options' button to give DATA more information about the file's format. Tap the 'OK' button to complete the dialog, make sure the correct file is selected and then tap on 'OK' again to start the importing operation.

Although I suggested creating a new database to import the text file into, you can also import into an existing database (though the rules remain the same: what you're importing must be compatible with the fields of the database receiving the text). As with merging databases, the file resulting from importing a text file into an existing database will be sorted if the sort option has been previously set up.

Printing

Assuming a printer is connected and the Series 5 is correctly set up, you can print either the record currently shown or all records 'in view'. This term refers to the browser, which

is usually displayed on the right hand side of the screen. The contents of the browser will be either all of the records in the database or the records matching the last search.

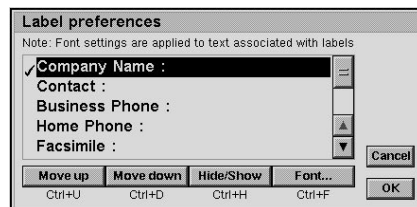
You can select whether to just print the current record or everything in the browser using the dialog in 'File | Printing | Print setup...'. 'Range' has two options: 'All entries in range' and 'Current entry only'. After selecting the one required, choose the number of copies and tap 'OK' or press [Enter].

The rest of the printing features are identical to those in other Psion applications. Note that it's usually worth looking at the print preview to make sure that what you're going to get is what you actually wanted.

Label preferences

At any time, even after data has been entered, the order of the labels and fields can be changed using 'Tools | Label preferences...', by highlighting a label and tapping the 'Up' or 'Down' buttons. The 'Hide/Show' button can be used to hide a label and its associated text in every record, thus maintaining a degree of secrecy, if needed. When a label is currently hidden, its name will appear greyed-out in the dialog. To 'unhide' it, select a hidden label and tap the 'Hide/Show' button again.

The 'Font' button allows you to alter the typeface and font effects for the highlighted field. The font selections will be applied to the contents of the field, not the label name itself.



Altering the label preferences



Note the large font for the 'Company name' label and the embedded WORD object

By tapping the 'Other' tab, further effects such as text colour can be applied. These facilities enable the user to highlight parts of the database in a variety of ways, depending on what information needs to stand out. In my DATA file I have simply chosen to make the top field larger and to embolden the phone number (because I'm forever dialling the fax number instead of the voice number).

All of the effects chosen from 'Tools | Label preferences...' are applied to all records, but it is possible to apply identical effects to an individual record as well:

1. Display the record.
2. Tap the 'Edit entry' button.
3. Highlight the desired field.
4. Tap the 'Font' button.

Embedding objects

Another feature which can be applied to just one record is an object inserted in a field (see issues 18 and 19 'Real World Objects' for more details on objects). You can insert objects using these steps:

1. Display the record in which you wish to place the object.
2. Tap the 'Edit entry' button.
3. Move the cursor to where you want the object to appear.

4. Tap the 'Object' button and choose 'Insert object' from the mini-menu.
5. Choose which type of object you wish to insert (WORD, SHEET, SKETCH or RECORD).
6. Once chosen, the screen will change to the appropriate application, with a large button marked 'Done'. Tap this when you've finished working within the object.
7. Tap the 'Save' button to save the updated record.

Note that once saved, WORD and RECORD objects will appear as simple icons. Whenever such an object icon is seen on one of the record cards, tapping it will display its contents in 'Read-only' mode. The contents of SKETCH and SHEET objects are normally displayed within the record card itself.

Off the peg databases

Although the database I used as an example throughout this series was an address book, anything that can be categorised can be made into a database. But before embarking on the creation of a major database of your own, take a look at what is already available. Many people have created databases on all kinds of specialist subjects and have made them available to the world at large via places like PocketInfo (www.pocketinfo.org).

FOR SALE, WANTED, ETC...

WANTED

Psion Travel modem, PsiFax and Route Planner for Germany/Austria/Benelux on SSD. All sensible prices considered.

Contact: Paul Mayell +49 2225 4513
(Germany)

Email: ibis@ibis-school.com

FOR SALE

1MB Siena with leather case and SSD drive
- £75.

Contact: Eric Forward on 01383 734010
(evenings and weekends only).

8MB Series 5 (May 98) with AC adaptor, leather case, PsiWin 2.1, Message Suite, Navigator and Monopoly. Also 'Programming Psion computers' book and CD-ROM. Six month warranty left, books and packaging as new - £ 450

Contact: Thierry Desprez on 01202 753 207 (office hours)

2MB Series 3a (broken hinges, but fully working), PsiWin link, Canon BJ30 plus spare cartridges. All boxed with manuals - £135

Contact: Chris on 0411 617984

Widget Leisure Pack - £20, DataView Pro - £20, Purple 3a/3c Backgammon/Chinese Chess - £15, Siena Backgammon/Chinese Chess - £10, Siena Chess - £10, Winlink 3 CD-ROM - £5, SIUFax - £5, Koch Shareware CD-ROM - £5, Siena Quick Reference Guide - £5, Series 3 leather case - £5, Total Psion Beginners' book (Series 3 range) - £5, Palmtop Holy Bible (Series 5) - £15, Sound Master (Series 5) - £15. All as new and boxed, and including UK postage.

Contact: 01869 246185 evenings/weekends only

Something to buy or sell?

Subject to available space this personal classified advertisement page is available free of charge as a courtesy to subscribers. Please contact the Editor (see page 1 for address details) directly to submit your ads.

This service is not available to non-subscribers, nor to Psion dealers.

Palmtop Publications bear no liability for items bought or sold from this page.

“On The Net”

The latest gossip from Psion's online community

by Pete Sipple

Rechargeables revisited...

The perennial power problem—are rechargeable batteries up to the job?

“I like rechargeables! Everyone said that one has to be very careful with rechargeable batteries because they suddenly die. Well at least they die quickly and everything stops working at once. With other batteries you find that you get to a stage where the infrared and backlight stop working, then the flash card stops, followed by ‘Replace Main Batteries’. This means that you have to keep changing batteries to make sure you use all the energy—newer batteries for comms and flash, and older ones for just internal memory.” (mrbush@cix.co.uk)

“Yes, but as you need to change them so frequently, the battery compartment catch gets stacks more wear, and if you're unlucky, like me, the batteries fall out and it's bye-bye data.” (mbanks@cix.co.uk)

“I can't see where you get the idea that you have to keep changing batteries around for different modes of use. If a pair of alkaline cells are sufficiently exhausted that I can't write to Flash memory, then they are sufficiently discharged to be discarded. If the same cells were being used in a Walkman or torch they would have been thrown out even sooner!” (rbeasley@cix.co.uk)

“Buy one of the alkaline rechargers. I have one, and it's earning its keep.” (sticky@cix.co.uk)

“Unlike electric shavers and portable cassette players, a Psion is a typical low-current application. That's one of the reasons NiCads don't really work that well, and why rechargeable alkalines are a better choice.” (neuss@informatik.th-darmstadt.de)

“How many people who own S5's also have mobile phones? How do you manage having to recharge your phone every couple of days? I would not be surprised if Psion migrate to a rechargeable pack a-la mobile phones as the power demand seems to be increasing with each generation. Maybe Psion should include a pack of 4 and a recharger with each Series 5a?” (brian.mosley@alert.demon.co.uk)

Hit the road

Street Planner, reviewed in the last issue of *Palmtop*, has proved to be a big hit with users. Here's what's being said...

“What is the quality of the plans like? From the picture on the product packaging, the centre of London looks like a map of the centre of Beirut, and yet the packaging also says something like: ‘Every street and alley covered!’ Presumably anyone hoping for A-Z type detail is going to be disappointed. Anyone any first hand experience?” (100326.241@compuserve.com)

“I have had it since yesterday and the detail is amazing, as is the number of cities, towns and even villages that it covers. It has some small streets in my town which I didn’t know even existed! Linked to my GPS, it is more accurate than Route Planner, and it also displays a status bar giving the name of the street you are in. Pretty amazing and worth it!” (106750.2364@compuserve.com)

“I think Street Planner is an amazing achievement given the amount of data, but I’m glad I had a large CompactFlash to make use of it. I’m tempted to get another large CF just for Route Planner and Street Planner.” (70374.2143@compuserve.com)

How many times?

This story should give you a gentle nudge to check that your data’s safe...

“I sent my Psion 3a back to the repair centre a couple of weeks ago with a cover letter stressing that I must have the data backed up before any repair is carried out, as I don’t have any means of backing the data up myself (i.e. no flash card or connection to PC). I get the Psion back 2 weeks later, and lo and behold my Psion has absolutely NOTHING in it! I phoned them up and spoke to the engineer who said that when he got the machine it was already empty and he had nothing to backup. The long and short is that Psion have taken my machine back and are upgrading it. However, I would still rather have my broken Psion WITH 5 years of data. Does anyone know what my legal rights are here and what I can do about this?” (andrew.harris@citicorp.com)

“Nothing. You have been extremely negligent yourself in not backing up important data for 5 years. You’ve also been extremely lucky to keep your data for so long.” (steve.waddicor@virgin.net)

“I, and I’m sure many others, feel very sorry for you, but for the cost of a flash disc (or PsiWin) you really left yourself vulnerable here didn’t you? I have forgotten the number of times I’ve told people “back it up”—the most recent being my brother’s partner when I found out she hadn’t made any recent copies of her PhD thesis (the size of a small book!) Unfortunately your cause for redress is probably very limited and so no amount of kicking or screaming is going to get your data back.” (michael@expl.demon.co.uk)

“I know it doesn’t help, but this is the best possible advertisement for a regular backup regime. I know this hurts now but everybody who uses a computer goes through something like this at least once. After that, we learn to back up monthly, weekly or even daily according to our requirements, and data loss in the future is nothing more than a minor inconvenience.” (ali.manson@symbian.com)

Psion related discussions take place in several Usenet newsgroups including comp.sys.psion.misc, as well as the Psion conference on CiX, the Psion area on AOL, the UPS5 Digest mailing list and the Psion forum on CompuServe.



Every item published in this section wins the author TWO free issues added to their subscription!

The invisible System folder

If you install a lot of new software onto your Series 5 then you probably need quite frequent access to the System folder, where all the main program files are stored. On the other hand, it's not something that you want left open for casual browsing, particularly as accidentally moving or deleting an important program file can wreak havoc when you try to run your software.

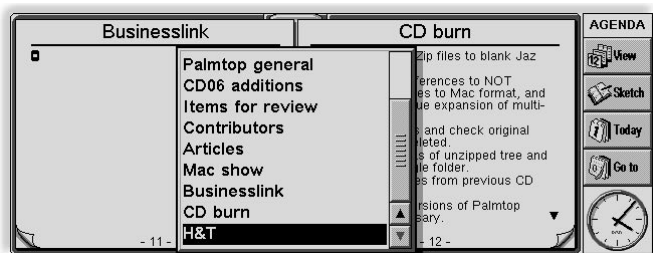
Changing the System folder attributes to 'Hidden' (from the 'File|Properties' menu option) will prevent casual access, but then you can only get to the folder by toggling 'Show hidden files' from the 'Tools|Preferences...' option, then toggling back again. You can also select 'Show System folder' from the same menu, but this is just as awkward to switch on and off every time you need to access the folder.

A simple way around this is to use the Series 5's 'Set bookmark' feature, under the 'Edit' menu. First check 'Show System Folder', then tap on the folder to select and open it. Secondly, select 'Set bookmark' ([Shift]-[Ctrl]-[b]) from the 'Edit' menu, and finally go to the 'Properties' option under the 'File' menu and set the System folder to 'Hidden'. The folder will then effectively disappear from the main system screen, but can instantly be invoked by pressing [Ctrl]-[b], or selecting 'Go to bookmark'.

John Jenkins
Stevenage, Hertfordshire

Navigating to-do lists

If you keep several to-do lists on your Series 5 AGENDA you'll find it tedious to use the arrow keys or endlessly tap the page corners to get to a particular list. A much faster way is to press [Tab] or tap anywhere in the to-do list titles at the top of the page. This will



Navigate quickly between To-do views with a tap of the pen...

bring up a scrollable list (see screen shot on previous page) where you can quickly tap on the selection you're looking for to instantly jump to that particular list. Note that doing the same in any of the other AGENDA views will bring up a calendar view instead.

Dave Richmond
Kowloon, HONG KONG

Hard spaces

The 'hard space' or 'non-breaking space' in WORD is very useful to keep words that belong together from wrapping onto a second line. For instance if you want to type the phrase "Series 3" near the end of a line it looks much better if the "3" always stays on the same line as the word "Series", rather than appearing at the start of the following line. To get a hard space on the Series 3 hold down the [Control] key while pressing the spacebar, or on the Series 5 hold down the [Shift] key while pressing the spacebar.

Diane Trimble
Broadstairs, Kent

Configuring the Extras bar

The most obvious way of changing the position of applications on the Extras bar is to use the corresponding Control Panel icon, but there is another way. When the Extras bar is visible, just press [Enter] or tap the grey region on the left hand side of the bar.

Eric Swanson
London

The SCUBA case...

Here's a way to make do-it-yourself palmtop computer cases, exactly how you want them—functional, protective and very cheap!

Go to a SCUBA diving store and ask them for some off-cuts from old wet suits, i.e. neoprene sheeting about 7mm thick or less, depending on the degree of protection you want. 7mm is ideal to protect against really rough handling and 3mm is handy for something to slip in your pocket. Such offcuts are usually free, as diving stores often use them for packing material even if they don't make their own suits.

Next, buy a small tube of black neoprene cement from the same place and construct your own case. Mine are designed to fit snugly with a top flap which will tuck back into the case, just like a business envelope. You can even use velcro to fasten the flap down, but I find that a long flap tucks nicely in without any further attachment.

Be sure to cut out your design very carefully, preferably with mitred joints (very sharp scissors are probably the best for cutting out the shape) and glue up each side carefully and as quickly as possible, finally pressing the joints together. Neoprene cement works by securely welding the neoprene material to itself (not the lining, which you must remove first, by carefully peeling it off) and gives you some latitude to correct small errors. You should finish up with a water resistant and durable protective case for next to nothing.

I am a scuba diver and have protected all my sensitive photographic and computer equipment together with both a Psion 3a and a Series 5. I have a thick one to throw into my dive bag and a thin one to slip in my pocket.

Brian Furniss
Tuffley, Gloucestershire

...or just use offcuts from an old fur coat, for that warm, winter look - Ed.

Q&A

Get **your** Psion-related questions answered by our editorial board...

Series 3c to 3mx upgrades?

Q The new Series 3mx looks great. Will it be possible to have my Series 3c upgraded to the same specification?

Allard Wijnands
Amersfoort, THE NETHERLANDS

A Unfortunately not. The 3mx uses a completely new motherboard design, so it's not possible to upgrade without replacing almost the entire internals of the machine.

SSD versus CF pricing

Q I use a Series 5 as a stand alone machine and read with great interest how I am able to expand its memory with large SSDs and CFs and that prices are constantly dropping. However, what is the difference between an SSD and a CF, why is there such a great difference in price between the two, and why in Palmtop issue 20 (Q&A) was it said that data stored on a CF is "still not completely safe".

John Phipps
Pilham, Lincolnshire

A SSDs (Solid State Disks) are the plug-in storage devices used for the Series 3 range of Psion machines, and are *not* compatible with the Series 5 range, which only accepts CF (CompactFlash) disks.

CF disks are much cheaper than SSDs because they are widely used for storage in other (non-Psion) palmtops, and to store images in digital cameras, which results in far higher production runs than with Psion's proprietary SSD technology. As many more manufacturers are producing them there is also more competition to keep the prices low.

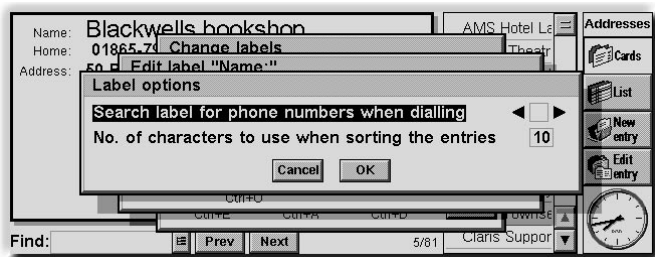
As with any electronic device there is a finite (though small) chance of failure at any time, so for 100% security with important data it's a good idea to keep a secondary copy of anything you normally keep on CF, SSD or your Psion's internal memory. This can either be on another CF or SSD, or on a PC-based backup.

Never keep both sets of backups in the same place, and especially not with (or in) your Psion. If disaster strikes then you'd lose all of your backups at once.

Series 5 DATA not sorting?

Q When sorting one of my Series 5 DATA files recently I found that the entries were not being properly sorted. All the entries beginning with 'A' were appearing before those beginning with 'B', but *within* each initial letter the sorting appears to be random. Is there a problem with my machine?

Reverend Kieran Whiteford
Killough, County Down



Don't forget to allow enough characters when sorting your database!

A In each individual Series 5 **DATA** file there is a (rather deeply buried) option to select (a) which field you wish to perform sorting on, and (b) how many characters you wish to include in the sort. If your machine is only getting the first character of the sort correct (i.e. the very first letter of the field) then it sounds like you have that particular file set to use only **ONE** character in the sort routine.

Newly created **DATA** files default to sorting by the first field, and to using the first 10 characters when determining the actual sort order. To change this value use 'Tools|Change labels...', then select the label you wish to sort on, tap the 'Edit' button, select 'Options' and set the number of sort characters from the dialog.

Using a large value in the dialog may slow down the sorting process a little for large databases, but the default value is usually a good compromise. Only increase the number if you have data fields where more than the first 10 characters might be identical, which is very uncommon.

Using *any* sorting at all in **DATA** slows searching significantly. If you can live with an unsorted database, you'll find operation a lot quicker.

Why no program listings?

Q Having recently purchased all the back issues of *Palmtop*, I noticed that in some of the early magazines you included some listings of small utility programs that readers could try out and perhaps alter to suit themselves. Why don't you still do this?

Ivor Clarke
Burwell, Cambridgeshire

A Most computer magazines of 20+ years ago included listings of programs you could type in for yourself, back in the days when the average desktop machine had as little as 1KB of RAM. Although palmtop computers still have a much smaller 'footprint' than desktop machines, the increased expectation of modern software by users has meant that you can rarely type in any useful program, even on a Psion palmtop. Such a program would take many hours to enter by hand, and the likelihood of entering such a tome without errors would be almost nil.

Questions?

All published questions will earn the author a **FREE** item of software from our special collection, valued at up to £70!

Musings...

Steve Clack looks at some of the wrong reasons for upgrading your Psion, and some of the wrong reasons for not upgrading...

With many existing (and prospective) Series 5 owners the whole issue of the ROM 1.1 upgrade has become nothing short of a fixation. There are those who really need outlining, sorting in spreadsheets and the few other things that the existing Series 5 won't do, but the vast majority can get along just fine without them. Put into the wider perspective of the computer's other capabilities, these few limitations pale into insignificance.

ROM o'phobia

Psion veterans can be forgiven for bemoaning the missing Series 5 features that were present on the Series 3, after all, it's only reasonable for consumers to expect a new computer to at least have all the functionality of its predecessors. We can endlessly berate Psion and argue that the Series 5 is incomplete, but the reality is that it still outguns every other similarly sized handheld computer on the market. Apart from an arguably better web browser, the current generation of Windows CE 2.0 machines generally look quite sorry in comparison: no style sheets or spell checker in the word processor, no graphing in the spreadsheet, an address book-only database, no object embedding, no print previews, etc. Against those omissions the lack of an outliner looks almost trivial. The crucial factor is that the Series 5 is an

immensely capable tool, and most of those who are 'holding out' for ROM 1.1 are simply waiting for the appearance of the Holy Grail rather than buying a computer that already answers more than ninety percent of their needs now.

Even from the majority who have never even heard of the promised ROM upgrade, we still get a lot of people asking us "Should I buy a Series 5 now, or is there something better around the corner?". In the computing world there is always something better around the corner. Think of the computer you were happily using ten years ago—you'd probably laugh if someone asked you to go back to using it now, and in terms of resale value you probably couldn't give it away, let alone sell it.

Deferring a purchase to wait for a better model to come out is a dangerous business, and is likely to leave the buyer in an endless cycle of "Do I", "Don't I?" while everyone else is just getting on with useful work on their computer. After all, excepting the few people who buy them for pure amusement, any kind of computer is intended as a productivity aid, and there's surely nothing less productive than being without one?

Upgrade fever

At the other end of the scale we have those who upgrade simply for the sake of it. Probably half the Series 3 users who ask us whether they should upgrade from a Series 3 to a Series 5 have little or no reason to make the change. My first question to all such enquiries is “What aspects of your current machine do you dislike, what tasks would you like it to perform but find that it’s incapable of, and what benefits do you expect to gain from a new machine?” For those who reply with answers like “I find myself typing a lot of data into the machine and would benefit from a better keyboard” or “I need to create reports containing graphs or illustrations” the answer is simple. But so many people answer with “Don’t know” or a protracted silence while they try to think of something convincing. I recently concluded such a conversation by recommending that a 3a user spend the cost of a new Series 5 on a holiday instead, to which he had to agree. The gist of the conversation was that the gentleman was happy with all the built-in applications of his 3a, had become quite accomplished in using them over his several years of ownership, had purchased adequate SSD storage to hold all the software he needed, and had learned to live happily with the small keyboard.

Thinking laterally

It’s common enough for people to buy things for dubious reasons, and if you have the cash to spare then go ahead, but if you’re on a budget then you may prefer to think of alternative ways to improve your computing. If you’ve already invested a lot of money in your existing Psion computer then perhaps you could add to its functionality by purchasing extra storage SSDs or software? The price of a new machine buys a lot of software, and you can probably afford to arm your current model to the teeth with good software for less than

it would cost to buy a new computer with no add-ons.

Something shiny and new...

Many of us, myself included, are guilty of the ‘Gadget Freak’ syndrome. We don’t really need another new toy, but simply relish the thought of getting to grips with a piece of new technology. We expend time convincing ourselves and our spouses that we have good reason to buy and eventually take the plunge regardless. For the gadget freak there is no hope of salvation, apart from the fact that sooner or later you’ll probably become an excellent computer consultant, by virtue of your intimate knowledge of all models!

Don’t worry, be happy!

The most important thing is of course that you’re happy with the machine you use. A palmtop computer is a very personal thing, like a mobile telephone or a pair of spectacles. It’s probably with you for most (if not all) of your working day, and has to be something you are comfortable with. The more you ‘personalise’ your palmtop with your own data files, templates and favourite software applications, all configured exactly for the way you work, the more it becomes the computer equivalent of a comfy old pair of slippers.

If your palmtop meets that requirement then look no further—you’ve probably already found your Holy Grail.

Next issue...

Planned for issue 22:

- **A roundup of drawing and painting programs for the Series 5. Four packages on test**
- **Battery options for your Psion - a full test of the many types now available**
- **Working for a living - the mobile sales-person**
- **The feature you've all been asking for, a new series on OPL programming for real beginners**
- **Starting up: handling infrared connections between Psion computers, printers, mobile phones and other devices**
- **Working with AGENDA, a new series to help you get the most from this powerful and flexible application**
- **An in-depth review of Notepad for the Series 5, plus much, much more...**